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2002 ANNUAL REPORT

WOLVERINE FUBE, INC.

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FINANCIAL

The Company's Internet sites

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neroliers the broadest product line of any North-American tube monutacturer and has leading market positions in rious product lines estrong brand recognition and an obistanding reputation for quality and service

which includes both residential and commercial applications. Wolverine OEMs of Herge commercial air econditioning was said that a reputation for producing annovative heat attansfer technology. addition, the Company supplies both tube and labricated products to consumer appliance, automotive and industrial equipmen manufacturers, withins and other power-generating enterprises, refining and chemical processing companies, olumbia

Headquartered in Hantsville. Alabama, Wolverine has strategically positioned manufacturing facilities in the United States, Canada: China and Rortugal Wolverine stock is traded on the New York Stock Exchange under the symbol WIV.

Financial Highlights

Wolverine Tube, Inc. and Subsidiaries

(Dollars in thousands except per share data)	2002	2001
Net sales	\$550,523	\$583,114
Income from continuing operations		
before income taxes	\$ 8,485	\$ 1 <i>5,787</i>
Income from continuing operations	\$ 7,170	\$ 11,442
Loss from discontinued operations,		
net of tax	\$ (1,610)	\$ (31,240)
Net income (loss)	\$ 5,560	\$ (19,798)
Income from continuing operations		
per common share – diluted	\$ 0.58	\$ 0.91
Net income (loss) per common share – diluted	\$ 0.45	\$ (1.63)
At December 31		
Total assets	\$550,720	\$539,427
Long-term debt	\$255,712	\$247,698
Stockholders' equity	\$200,635	\$201,412
Number of employees	3,199	3,189

FORWARD-LOOKING STATEMENT

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933. Forward-looking statements include statements regarding our goals, beliefs, plans or current expectations, taking into account the information currently available to our management. Forward-looking statements include all statements that do not relate solely to current or historical fact. For example, when we use such words as "anticipate," "estimate," "intend," "expect," "believe," "plan," "may," "should," "would" or other words that convey uncertainty of future events or outcomes, we are making forward-looking statements.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Many of these risks are beyond our ability to control or predict. You are cautioned not to unduly rely on these forward-looking statements when evaluating the information included in this presentation. For a more detailed discussion of these and other risk factors, please read carefully the information in the Company's Annual Report on Form 10-K for the most recently ended fiscal year and reports filed from time to time with the Securities and Exchange Commission. We undertake no obligation to review or revise any particular forward-looking statements contained herein to reflect events, conditions or circumstances occurring after the date hereof or to reflect the occurrence of unanticipated events.



April 9, 2003

Dear Shareholders:

Please take notice that the 2003 Annual Shareholders Meeting originally scheduled to be held on May 14, 2003 at 8:30 a.m., local time, at The Benjamin Hotel, 125 East 50th Street, New York, New York 10022 has been changed to May 14, 2003 at 8:30 a.m., local time, at The American Conference Centers, 780 Third Avenue, New York, New York 10017.

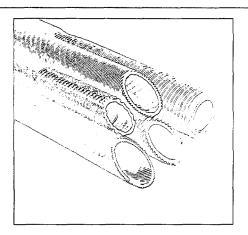
We apologize for any inconvenience this may have caused anyone.

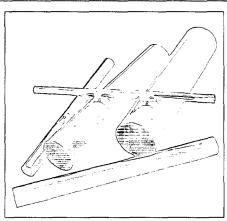
Sincerely,

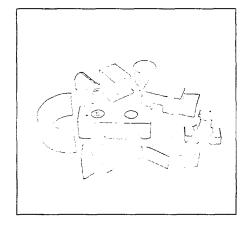
James E. Deason

Secretary

SEGMENT INFORMATION Total 310.2 Million SALES GROSS PROFIT FORMATION SEGMENT INFORMATION SEGMENT INFORMATION Total \$550.5 Million SALES GROSS PROFIT Formation Products Wholesole Products Total \$58.4 Million







COMMERCIAL PRODUCTS

Commercial products represent the largest segment of the Company's sales and volumes. This segment includes technical, industrial and copper alloy tube as well as fabricated and metal joining products. Customers for these products include some of the world's largest and best-known manufacturers, particularly in the commercial and residential heating, ventilation and air-conditioning, refrigeration and home appliance industries. These products are manufactured globally, with facilities in China and Portugal producing technical tube and fabricated products for those markets.

	2002	2001
(Millions)		
Shipments in pounds	209.6	210.3
Net sales	\$421.2	\$444.2
Gross profit	\$ 51.7	\$ 50.1

WHOLESALE PRODUCTS

Wholesale products include plumbing and refrigeration service tube products, primarily in standard sizes and lengths used for plumbing, air-conditioning and refrigeration service applications. Wholesale products are manufactured to meet various international, national, regional and municipal specifications and code requirements. These products are sold primarily through master distributors and wholesalers and are manufactured in the U.S. and Canada.

	2002	2001
(Millions)		
Shipments in pounds	79.1	76.3
Net sales	\$93.9	\$97.6
Gross profit	\$ 4.4	\$ 9.3

ROD, BAR & OTHER PRODUCTS

Rod, bar and other products include a broad range of copper and copper alloy solid products, including round, rectangular, hexagonal and specialized shapes. These products are used in the electrical, power generation, construction hardware and shipbuilding industries. Recently introduced anode bars are used in the aluminum smelting industry. These products are manufactured primarily in Canada. Other products consist of various tube, rod, bar and other items sold by our product distribution facility in The Netherlands.

	2002	2001
(Millions)		
Shipments in pounds	21.6	21.5
Net sales	\$35.4	\$41.3
Gross profit	\$ 2.4	\$ 2.8

To Our Shareholders and Other Constituents:

Wolverine Tube continues to leverage its core strengths – quality, service and global presence. We remain focused on opportunities that deliver growth and market advantage. We continue to show improved operating fundamentals, reduced cost structure, increased market share and a significant increase in cash flow. Our strategy and operating tactics kept us strong in 2002, in a difficult economic environment. We strive for continued improvement in growth and stakeholder value.

FINANCIAL OVERVIEW

For the year ended December 31, 2002, net sales were \$550.5 million as compared to \$583.1 million in 2001, a decrease of 6%. Total pounds of product shipped were 310.2 million as compared to 308.2 million pounds in 2001. Gross profit for 2002 was \$58.4 million, compared to \$62.2 million in 2001. Income from continuing operations for the year was \$7.2 million, or \$0.58 per diluted share, as compared to \$11.4 million, or \$0.91 per diluted share in 2001. On a comparable basis, after adjusting for the amortization of goodwill, income from continuing operations in 2001 would have increased by \$3.1 million pretax, and earnings per diluted share would have increased \$0.22. Underlying elements in these results include:

Project 21, our capital investment initiative, and WOW, our War on Waste program, produced significant improvement in our overall cost structure. This reduced cost structure contributed to a 6% decrease in manufacturing costs, from \$0.86 per pound in 2001 to \$0.81 per pound in 2002. Moreover, these investments provide the opportunity for increased benefits as volumes increase. The benefits from these cost reductions and process efficiencies allowed us to offset a significantly less favorable product mix as volumes for our higher value-added

commercial products was decreased and volumes for commodity wholesale products was increased. Furthermore, wholesale product pricing decreased over 20% in the U.S., year over year, as the primary suppliers in this market competed for share. On an annual basis, this is the lowest pricing level we have seen in this market in over five years.

Cash flow from operations increased to \$41.4 million from \$26.6 million in 2001. Much of this improvement was a result of working capital management, a reduction in accounts receivable days sales outstanding, and a \$10 million reduction in inventory. This contributed to free cash flow of approximately \$34 million in 2002.

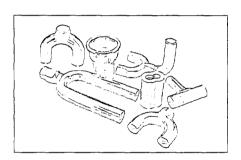
In March of 2002, we completed a debt refinancing whereby we raised \$120 million in a private placement of Senior Notes. While this financing provided financial stability and flexibility, it also increased our overall leverage and incremental interest expense. In the second half of 2002, we utilized a portion of our free cash flow to reduce outstanding debt by over \$15 million. Additionally, we executed an interest rate swap to convert \$50 million of our fixed rate debt to a floating rate, which, at current interest rate levels, would reduce annualized interest expense by approximately \$1 million.

LETTER TO SHAREHOLDERS CONTINUED

In addition, despite the tough economy, we significantly improved our market positions and also increased share in certain commercial markets.

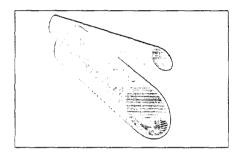
- We advanced our penetration into global markets by utilizing our Netherlands distribution and services center and with the ramp up of our plant in Esposende, Portugal, which occurred in late April.
 Our facility in Shanghai, China continues to increase volumes and profitability. Today, to our knowledge, Wolverine is the only company supplying customers with technical tube and fabricated products manufactured in North America, Asia and Europe.
- We achieved a record level of new customer business, increasing our global market share. In fact, we believe that Wolverine now has the

- largest market share of any company supplying tubing, fabricated products and brazing alloys to the consumer appliance market.
- To help our customers increase efficiency, reduce labor, set up time, maintenance and scrap, we introduced industrial tube products in coils that are two to four times larger than those previously offered, supplied in a user-friendly package. On the service side, we have introduced a technology to automate elements of technical tube installation in large chillers.
- And, we introduced a technology breakthrough in 2002 that holds tremendous promise for our present customers and opens the door to diversify our business base. More about this technology follows.



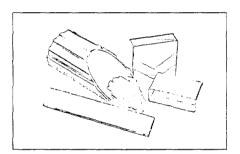
TOUGH-MINDED INITIATIVES

Efficient asset allocation, especially in a tough economy, is vital to maximizing return on investment. As such it is one of our highest priorities, and in 2002 we reduced capital expenditures to \$7.7 million versus \$27.6 million in 2001. We will continue to exercise a conservative approach to capital expenditures, especially until we clearly see economic recovery. At the same time, we will continue to invest in selected North American plants and in Shanghai, China, supporting those markets that we believe will grow and where we can continue to leverage our global capabilities to gain market share. Moreover, in addition to manufacturing technical tube for local markets, our Portugal and Shanghai plants are now manufacturing fabricated products for local customers and also for export to the U.S. Demand for fabricated products continues to



grow as customers increase their global outsourcing decisions.

This outsourcing initiative is particularly illustrated by work we are doing for a large OEM cusiomer in Mexico. We have been able to provide higher quality, lower cost subassemblies from our Carrollton, Texas facility than those the customer had previously been manufacturing themselves in Mexico. This exemplifies how our experience and efficiency translate into increased revenue and increased market share in higher valueadded fabricated products. Wolverine is well equipped to be a provider of choice to those companies who want high-quality results along with excellent service. We achieve this by leveraging our metallurgic and fabrication expertise - difficult-to-match knowledge that we have gained from over 86 years of market leadership.



We continue to pursue opportunities to expand our product offerings that support the requirements of our customers to increase efficiencies and reduce costs. We recently announced an agreement with Omni Technologies to produce and market Silvacore brazing alloys, a product which increases brazing reliability and consistency while reducing labor and material costs for our customers.

Wolverine is also pursuing opportunities to expand our buy/resell channels. In addition to contributing to our financial results, this enhances our service offering by simplifying the buying process for our customers, more and more of whom are interested in consolidating suppliers.

LETTER TO SHARPHOLDERS CONTINUED

MIGH POTENTIAL TECHNOLOGY

Micro Deformation Technology (MDT) is an innovative forming process that can simultaneously form, lift and shape the surface area of many materials. This new, patented technology has been utilized to greatly enhance the heat transfer performance and energy efficiencies of Wolverine's technical tube product line. Introduced under the brand name Turbo-MD, these products are being qualified in 2003 by a number of customers, and should increase heat exchanger efficiency in large air chillers by as much as 30% over traditionally enhanced tubes. Additionally, we expect to further augment this level of performance in future product offerings as the capabilities of this exciting technology are optimized.

Furthermore, we believe that MDT has commercial application possibilities beyond copper and copper alloy products as it can be used with any number of ductile materials including plastic, rubber, aluminum, precious metals, titanium, and many more. We envision application possibilities in such diverse industries as filtration, surface preparation, and capillary structures, as well as our own heat transfer market.

MDT has the ability to form micro channels of varying depths, orientation, spacing and angularity, and do so without any loss of the base material or the need for lubrication. The MDT process lends itself to products requiring high precision and repeatability. In short, MDT has numerous applications pertaining to surface preparation, forming and reconditioning.

While we have successfully applied the technology to HVAC products, we are having business discussions with co-development partners to determine other practical commercial applications for MDT. There is no doubt that we have only just begun to discover the many ways and places this technology can be used to create superior new products and to expand Wolverine's market and customer base.

A TOUGH ECONOMY AHEAD

Economic and other uncertainties, both domestically and in other parts of the world, continue to hinder business recovery. In our markets, we continue to see weak commercial construction and soft demand for the products produced by our customers. Understandably cautious, we believe the economic environment in 2003 will remain much the same as in the past year. Having said that, given continued market penetration, globalization, new products and significant cost reductions, we expect increases in revenues in the mid-tohigh single digits and profits in the high single to low double-digit range. A stronger economy would further drive top and bottom line growth.

In 2003, we will continue to move closer to our stated goal of a more conservative financial profile. This will be achieved by continuing to improve operating results and improving trends in positive free cash flow, both domestically and internationally. We expect to continue to gain share in our traditional businesses, and at the same time, we are excited about working with present and new customers to find applications for our innovative products, services and technologies.

The challenges of 2002 have had a profound effect on our employees, customers and other stakeholders. The effect has been to toughen our resolve to continue the encouraging

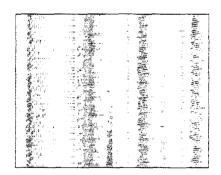
progress that has been made. We are determined to grow the company and reward all the constituencies to whom we are responsible.

I am grateful for your support in 2002 and anticipate a prosperous future for all.

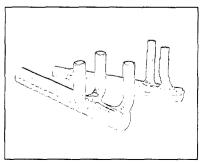
Sincerely,



Dennis Horowitz Chairman, President and Chief Executive Officer April 7, 2003







UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 FORM 10-K

X Annual report pursuant to Section 13 or 15(d) of the December 31, 2002,	ne Securities Exchange Act of 1934 for the fiscal year ended
200011001 51, 2002,	OR
Transition report pursuant to Section 13 or 150	(d) of the Securities Exchange Act of 1934 for the transition
period fromto	
Commission f	ile number 1-12164
	NE TUBE, INC. ant as specified in its charter)
Delaware	63-0970812
(State of Incorporation)	(IRS Employer Identification No.)
200 Clinton Avenue West, 10 th Floor	
Huntsville, Alabama	<u>35801</u>
(Address of principle executive offices)	(Zip Code)
	353-1310
(Registrant's Telephone	Number, including Area Code)
Securities registered pursuant to Section 12(b) of the Act:	
Title of each class:	Name of exchange on which registered:
Common Stock, \$0.01 Par Value	New York Stock Exchange
Securities registered pursuant to Section 12(g) of the Act: N	None
	ed all reports required to be filed by Section 13 or 15(d) of the 12 months (or for such shorter period that the registrant was ach filing requirements for the past 90 days.
	oursuant to Item 405 of Regulation S-K is not contained herein, 's knowledge, in definitive proxy or information statements my amendment to this Form 10-K. []
Indicate by check mark whether the registrant is an YES X NO	accelerated filer (as defined in Rule 12b-2 of the Act).
June 28, 2002, was approximately \$91,200,000 based up	g common equity held by nonaffiliates of the registrant as of the closing price reported for such date on the New York of Common Stock held by executive officers and directors of y be deemed to be affiliates.
Indicate the number of shares outstanding of each class of	Common Stock, as of the latest practicable date:
<u>Class</u> Common Stock, \$0.01 Par Value	Outstanding as of March 7, 2003 12,262,439 Shares

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the annual stockholders meeting to be held May 14, 2003, are incorporated by reference into Part III.

FORM 10-K

YEAR ENDED DECEMBER 31, 2002

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PARTI

ITEM 1

BUSINESS

Introduction

We are a world-class quality manufacturer of copper and copper alloy tube, fabricated and metal joining products and copper and copper alloy rod and bar products. We focus on custom-engineered, higher value-added tubular, fabricated and metal joining products which enhance performance and energy efficiency in many applications, including commercial and residential heating, ventilation and air conditioning, refrigeration, home appliances, automotive, industrial equipment, power generation, petrochemicals and chemical processing. We believe that we have the broadest product offering of any North American manufacturer of copper and copper alloy tube, which allows us to offer packaged solutions and pursue cross-selling opportunities. Our technological expertise has helped us to establish strong and long-standing relationships with many of the leading users of higher value-added copper tube in North America and enables us to maintain leading market shares in our most important product and geographic markets.

We make available on our website, free of charge, http://www.wlv.com/, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports as soon as reasonably practicable after electronically filing or furnishing such material to the Securities and Exchange Commission.

History and Structure

We are a Delaware corporation organized in 1987. We are the successor to a business founded in Detroit in 1916. In August 1993, we and certain stockholders engaged in an initial public offering of 6,555,000 shares of common stock and the net proceeds to us were approximately \$46.4 million. In September 1995, we completed a secondary public offering of 4,882,700 shares of common stock. No additional shares of common stock were issued by us in conjunction with this secondary stock offering.

We have expanded our operations through acquisitions and international growth over the past five years. In May 1998, we acquired a 240,000 square foot welded tube manufacturing facility in Jackson, Tennessee, and the related equipment and technology, from Korea-based Poongsan Corporation, for approximately \$35.4 million in cash. In July 1998, we opened our Shanghai, China facility. This 60,000 square foot plant specializes in the manufacture of higher value added copper and copper alloy technical tube as well as brazed assemblies.

In September 2000, we acquired from Engelhard Corporation its joining products business, a leading manufacturer of brazing alloys and fluxes, as well as a supplier of lead-free solder, based in Warwick, Rhode Island, for approximately \$41.8 million in cash.

In December 2001, we completed construction of our 33,000 square foot technical tube manufacturing facility in Esposende, Portugal. We invested approximately \$9.0 million to complete the facility, which began commercial production in January 2002.

Industry

The industry in which we operate is multi-faceted. Several of our competitors produce tube products of a single type. In contrast, we produce a broad array of products, such as technical tube for large commercial air conditioners used in high-rise buildings, industrial tube and fabricated products used in residential and light commercial air conditioning units, wholesale tube used in commercial and residential construction, and copper and copper alloy tube used in power generation, petrochemical and marine applications. Moreover, our metal joining products are used in almost all of these applications.

Competition

While no single company competes with us in all of our product lines, we face significant competition in each of our product lines. Cerro Copper Products Co., Inc., Industrias Nacobre S.A. de C.V., Kobe Copper Products Inc., Wieland - Werke AG, Mueller Industries Inc., Olin Corporation, Outokumpu American Brass Company, J.W. Harris Company, Inc. and others compete with us in one or more product lines. Minimal product differentiation among competitors in our wholesale and rod and bar product lines creates a pricing structure that enables customers to differentiate products almost exclusively on price. In these product areas, certain of our competitors have significantly larger market shares than us, and tend to be the industry pricing leaders. If our competitors in these product lines were to significantly reduce prices, our business, operating results or financial condition could be adversely affected.

For certain of our higher value-added commercial products, which have higher margins, we compete primarily on the basis of the technical advantages of these products. Technical improvements by competitors could reduce our competitive advantage in these product lines and thereby adversely affect our business, operating results or financial condition. We could also be adversely affected if new technologies emerge in the air conditioning, refrigeration or other consumer industries that reduce or eliminate the need for copper and copper alloy tube, fabricated products and metal joining products. Certain of our products, such as plumbing tube, compete with products made of alternative substances, such as polybutylene plastic. A substantial increase in the price of copper could decrease the relative attractiveness of copper products in cases where an alternative exists and thereby adversely affect our business, operating results or financial condition.

Products

We classify our products as commercial products, wholesale products or rod, bar and other products.

Commercial Products

Commercial products consist of several types of technically enhanced tube and fabricated products made to customer specifications, as well as our metal joining products. We believe that we are the primary supplier of one or more commercial products to some of the world's largest and best known manufacturers, particularly in the commercial and residential heating, ventilation and air-conditioning, refrigeration and home appliance industries. Generally, our technical tube

and fabricated products are custom designed for specific customer applications and manufactured and sold directly to customers. Because of the higher level of added value, profitability tends to be higher for commercial products than for our other products.

Our commercial products include:

Industrial Tube. Small (as small as .01") and medium diameter copper tube used primarily by residential air conditioning, appliance and refrigeration equipment manufacturers is known as "industrial" tube. Industrial tube is made to customer specifications for equipment manufacturing. Our industrial tube products include coils in lengths of up to one mile (to permit economical transport to customers for further processing), smooth straight tube, internally enhanced tube with internal surface ridges to increase heat transfer in air conditioning coils, and very small diameter capillary tube (for control valve applications).

Technical Tube. Technical tube is used to increase heat transfer in large commercial air conditioners, heat exchangers for power generating and chemical processing plants, water heaters, swimming pool and spa heaters and large industrial equipment oil coolers. Small, wedge-like grooves (fins) on the outer surface, together with internal enhancements of technical tube, increase surface area and refrigerant agitation, thereby increasing heat transfer efficiency. We were the first to commercially develop integral finned tube, in which the fins are formed directly from the wall of the tube, and we hold patents in this area.

Copper Alloy Tube. Copper alloy tube (principally copper mixed with nickel) is manufactured for certain severe uses and corrosive environments such as condenser tubes and heat exchangers in power generating plants, chemical plants, refineries and ships. Our copper alloy tube products include smooth and surface enhanced tube produced from a variety of alloys. Also included in the alloy tube category are surface enhanced titanium, brass and steel tube we produce from smooth tube supplied by outside sources.

Fabricated Products. Fabricated products encompass a wide variety of copper, copper alloy, steel and aluminum tube products and subassemblies for a number of different applications. Precision drawn tube can be supplied in exact tolerance cut lengths or coils. Specialty fabricated parts, sub-assemblies and components (such as return bends and manifolds) are also produced. Capabilities which include cutting, bending/swaging, end spinning, hole piercing/drilling, specialized coiling and brazing, can be applied to a wide range of products.

Metal Joining Products. Metal joining products include brazing alloys, fluxes and lead-free solder used in the air conditioning, plumbing, electronic, lighting, shipbuilding, aerospace, general industrial and other metal-joining industries. There are over 2,000 product variations in this category, marketed under such brand names as Silvaloy®, Silvabrite®, Silvabrite 100®, Black Flux TM and Ultra Flux®.

Commercial product sales accounted for 77%, 76% and 78% of the Company's net sales in 2002, 2001 and 2000, respectively.

Wholesale Products

Wholesale products consist of plumbing and refrigeration service tube produced in standard sizes and lengths primarily for plumbing, air conditioning and refrigeration service applications.

Many major competitors manufacture the most common 3/4" and 1/2" diameter plumbing tube. These products are considered commodity products because price and delivery are the primary competitive factors. Plumbing tube and refrigeration service tube are sold primarily through master distributors and wholesalers.

Wholesale product sales accounted for 17%, 17% and 16% of the Company's sales in 2002, 2001 and 2000, respectively.

Rod. Bar and Other Products

Rod, bar and other products consist of a broad range of copper and copper alloy solid products, including round, rectangular, hexagonal and specialized shapes. Brass rod and bar are used by industrial equipment and machinery manufacturers for valves, fittings and plumbing goods. Copper bars are used in electrical distribution systems and switchgear. Copper and copper alloy rod and bar products are sold directly to manufacturers and to service centers that keep an inventory of standard sizes. Other products consist of various tube, rod, bar and other items sold by our product distribution facility in The Netherlands.

Rod, bar and other products accounted for 6%, 7% and 6% of the Company's sales in 2002, 2001 and 2000, respectively.

Sales and Marketing

We use a direct sales force augmented by independently contracted sales agents to pursue global sales opportunities. In addition, we employ customer service representatives responsible for responding to customer questions and undertaking or initiating any required customer service response. We believe our sales structure forms a critical link in communicating with our customers. Our sales and marketing employees are particularly important in the higher value-added product segments, in which we often work with customers in their product enhancement and new product development efforts. The sales function is coordinated through key senior executives responsible for our sales and marketing efforts.

North America. Our sales structure in North America consists of sales officers and managers, field marketing representatives, customer service representatives and independent sales agents who are responsible for selling and servicing accounts.

International. Our overseas export sales are carried out both directly with major overseas customers and through foreign sales agents. We have sales, marketing and business development offices in Apeldoorn, The Netherlands and Shanghai, China.

For information concerning the amount of sales, gross profit and certain other financial information about foreign and domestic operations see Note 20 of the Notes to Consolidated Financial Statements.

Energy Efficiency and Governmental Regulations

We expect that demand for our higher value-added, energy efficient tubes will continue as manufacturers continue to seek ways to produce more energy efficient and lower operating cost units and as existing commercial air conditioners continue to be replaced in response to the ban on production of chlorofluorocarbons. Government regulations at local, state and federal levels

periodically provide various incentives for more energy efficient products, such as air conditioners, refrigerators and similar appliances, which may also increase demand for our products. However, there can be no assurance that this anticipated demand will materialize, or that we will not face increased competition, with an adverse effect on profitability, from other manufacturers in this higher value-added segment.

Markets

Major markets for each of our product lines are set forth below:

Products	Major Markets
Commercial Products	
Technical Tube	.Commercial air conditioning manufacturers, power and process industry, heat exchanger manufacturers, water, swimming pool and spa heater manufacturers and oil cooler manufacturers.
Industrial Tube	Residential and small commercial air conditioning manufacturers, appliance manufacturers, automotive manufacturers, industrial equipment manufacturers, refrigeration equipment manufacturers and redraw mills (which further process the tube).
Copper Alloy Tube	.Utilities and other power generating companies, refining and chemical processing companies, heat exchanger manufacturers and shipbuilders.
Fabricated Products	Commercial and residential air conditioning manufacturers, refrigeration manufacturers and consumer appliance manufacturers. Automotive, controls, welding, electrical, marine, building, heat transfer industries and other general industrial applications.
Metal Joining Products	Residential and commercial air conditioning manufacturers, plumbing, electronic, lighting, shipbuilding, aerospace, catalysts and other metal joining industries.
Wholesale Products	Plumbing wholesalers and refrigeration service wholesalers.

Rod, Bar and Other Products......Electrical equipment and automotive parts manufacturers, locomotive, aluminum smelting and other industrial equipment manufacturers and metal service centers.

Key Customers

In 2002, 2001 and 2000 our 10 largest customers accounted for approximately 47%, 44%, and 45%, respectively, of our consolidated net sales. No customer accounted for 10% or more of our consolidated net sales in 2002, 2001 or 2000.

Backlog

A significant part of our sales are based on short-term purchase orders. For this reason, we do not maintain a backlog and we believe that backlog is not necessarily a meaningful indicator of future results. A significant amount of our sales result from customer relationships wherein we provide a high degree of specialized service and generally become the largest supplier of a customer's copper and copper alloy requirements. Under these arrangements, our customers provide forecasts of their requirements, against which purchase orders are periodically released. In several cases we have entered into multi-year arrangements with major customers to continue to serve as the predominant supplier and in many cases the exclusive supplier on a global basis.

Manufacturing

The manufacture of copper and copper alloy tube, fabricated products and metal joining products consists of casting, extruding, drawing, forming, joining and finishing processes. In most cases, the raw material is first cast into a solid cylindrical shape or "billet." The billet is then heated to a high temperature, a hole is pierced through the center of the cylinder, and the cylinder is then extruded under high pressure. The material is either drawn to smaller sizes or reduced on a forging machine and then drawn to smaller sizes. The outside and/or inside surface may be enhanced to achieve the desired heat transfer qualities. Depending on customer needs, bending, shaping, precision cutting, forming, annealing (heating to restore flexibility), coiling or other operations may be required to finish the product.

Virtually all of our tube products are seamless as opposed to welded tube, with the exception of the tube manufactured at our Jackson, Tennessee location. Welded tube is made from a flat strip that is rolled and welded together at the edges.

Raw Materials, Suppliers and Pricing

Our principal raw materials are copper, nickel, zinc, tin and silver. In 2002, we purchased approximately 327 million pounds of metal, approximately 90% of which was copper. We contract for our copper requirements with a variety of sources, including producers, merchants, brokers, dealers and industrial suppliers. Our raw materials are available from a variety of sources, and we do not believe that the loss of any one source would materially affect our business, operating results or financial condition.

The key elements of our copper procurement and product pricing strategies are the assurance of a stable supply and the avoidance of exposure to metal price fluctuations. The price of copper we purchase is based on fluctuating market prices, usually with the Commodities Exchange (COMEX) price as a benchmark. We generally have an "open pricing" option under which we may set the price of all or a portion of the metal subject to a purchase contract at any time up to the last COMEX trading day (usually two days before the end of the month) of the last month in the contract period.

In the majority of cases, the price of our products to our customers contains two components: (i) a metal charge based on the market value of the metal content on the date of shipment of the product to the customer; and (ii) a fixed fabrication charge. In other cases, we quote a firm price to the customer, which covers both the metal price and the fabrication charge. In either case, we minimize our exposure to metal price fluctuations through various strategies. Generally, at the time the metal price for the customer is established, we either price an equivalent amount of metal under our open pricing arrangements with our suppliers or purchase a copper forward contract for the equivalent amount of metal. It is not our policy to attempt to profit from fluctuations in copper prices by taking commodity risks or speculative commodity positions.

Research and Development

Our research and development efforts are primarily conducted in our Technology Center located in Decatur, Alabama and are devoted to new product development, manufacturing process improvements, new manufacturing process developments and new applications. While developing new products for general use, we work very closely with certain major customers to develop specific new products for their applications. To compliment our research and development capabilities, we engage with universities as well as governmental and private research organizations. Through our Technology Center we support the engineering and testing of specialized products and enhancements of our custom-engineered processes through which we tailor products to the specifications of each customer.

In 2002, we announced the introduction of the new, innovative Micro-Deformation Technology MDT™. This technology was used in developing highly enhanced new heat transfer products for large chiller manufacturers. Additionally, this technology may enable us to develop products for non-tube applications including electronic cooling, filtration, catalyst and others. We have continued our participation in several industrial, university and governmental research projects relating to more efficient heat transfer tubes for industrial, commercial and residential heating and cooling applications as well as refrigeration, power generation, chemical and petrochemical industries. Our research and development expense was \$3.1 million in 2002, \$3.7 million in 2001 and \$3.7 million in 2000 and it is anticipated that a similar level of expenditure will be maintained in 2003. In addition to our Technology Center, we utilize our manufacturing facilities and technical personnel to assist in manufacturing process improvements as well as new product development as it relates to those manufacturing facilities.

Environmental Matters

Our facilities and operations are subject to extensive environmental regulations imposed by federal, state, provincial and local authorities in the United States, Canada, China and Portugal with respect to emissions to air, discharges to waterways, and the generation, handling, storage, transportation, treatment and disposal of waste materials. In addition, we have incurred, and in

the future may incur, liability under environmental statutes and regulations with respect to the contamination of sites we own or operate (including contamination caused by prior owners and operators of such sites, abutters or other persons) and the off-site disposal of hazardous substances.

We believe our operations are in substantial compliance with the terms of all applicable environmental laws and regulations as currently interpreted. We utilize an active environmental auditing and evaluation process to facilitate compliance with applicable environmental laws and regulations. However, we expect that future regulations and changes in the text or interpretation of existing regulations may subject our operations to increasingly stringent standards. While the precise effect of these changes on our business cannot be estimated, compliance with such requirements may make it necessary, at costs which may be substantial, to retrofit existing facilities with additional pollution-control equipment and to undertake new measures in connection with the storage, transportation, treatment and disposal of by-products and wastes.

We had a reserve of approximately \$1.5 million for environmental remediation costs at December 31, 2002. The total cost of environmental assessment and remediation depends on a variety of regulatory, technical and factual issues, some of which cannot be anticipated. While we believe that the reserve, under existing laws and regulations, is adequate to cover presently identified environmental remediation liabilities, there can be no assurance that such amount will be adequate to cover the ultimate costs of these liabilities, or the costs of environmental remediation liabilities that may be identified in the future.

Employees

As of December 31, 2002, we had a total of 3,199 employees. Our employees are not represented by a union except for a majority of the hourly employees at our Montreal, Quebec plant, representing approximately 10% of our total employees, which is unionized and covered by a collective bargaining agreement that expires on March 22, 2005. In February 2003, we received a petition by the Arkansas Regional Council of Carpenters/United Brotherhood of Carpenters and Joiners of America requesting certification of representation of 45 employees comprising generally the engineering department of our Shawnee, Oklahoma facility. We objected to the bargaining unit size and received a ruling from the National Labor Relations Board on March 20, 2003 increasing the unit size to 56 employees. At this time, we are appealing this ruling. Otherwise, an election vote by the employees in this bargaining unit is probable within 45 days from March 20, 2003. In accordance with the above comments and, as a whole, we believe our relations with our employees are satisfactory.

Patents and Trademarks

We own a number of trademarks and patents (in the United States and other jurisdictions) on our products and related manufacturing processes, and we have granted licenses with respect to some of our trademarks and patents. While we believe that our patents and trademarks have competitive value, we do not consider our success as a whole to be primarily dependent on our patents, patent rights or trademarks.

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

Certain of the statements and subject areas contained herein in "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" are made pursuant to the "Safe Harbor" provisions of the Private Securities Litigation Reform Act of 1995. Forward looking statements include statements regarding our goals, beliefs, plans or current expectations, taking into account the information currently available to our management. Forward-looking statements include all statements that do not relate solely to current or historical fact. For example, when we use such words as "anticipate," "intend," "expect," "believe," "plan," "may," "should," "would" or other words that convey uncertainty of future events or outcome, we are making forward looking statements. All statements which address operating performance, events or developments that we expect or anticipate will occur in the future, including statements relating to operating performance, restructuring strategies, property, plant and equipment expenditures and sources and uses of cash, are forward-looking statements. These forwardlooking statements are subject to various risks and uncertainties that could cause actual results to differ materially from those stated or implied by such forward-looking statements. We undertake no obligation to publicly release any revision of any forward-looking statements contained herein to reflect events or circumstances occurring after the date hereof or to reflect the occurrence of unanticipated events.

With respect to expectations of future earnings, operating performance, restructuring strategies, property, plant and equipment expenditures and sources and uses of cash, factors that could affect actual results include, without limitation:

our ability to dispose of our properties held for sale and realize their carrying values;

our ability to achieve growth rates and profit projections assumed in the valuation of our goodwill;

the impact of interest rates on the valuations of our pension liabilities and goodwill;

cyclicality, seasonality and weather conditions, which affect the sales of our products;

the impact of competitive factors in our industry, including the effect of pricing, product lines and other actions taken by our competitors;

our ability to maintain our relationships with our major customers;

a reduction in demand for our products;

our significant amount of debt and the restrictive covenants contained in our debt agreements;

our ability to service our debt and incur additional debt;

our potential exposure to environmental liabilities;

economic, political and currency risks relating to our international operations;

our ability and the ability of our customers to maintain satisfactory relations with union employees;

business risks that may arise if we undertake strategic acquisitions in the future;

extraordinary fluctuations in the markets for raw materials;

risks to our competitive position from changing technology or the loss of our intellectual property;

business and economic risks relating to government regulations that impact our industry; the mix of our geographic and product revenues;

and various other factors, many of which are beyond our ability to control or predict.

Executive Officers of the Registrant

The following table sets forth certain information with respect to each of our executive officers:

<u>Name</u>	<u>Age</u>	Positions with the Company
Dennis J. Horowitz	56	Chairman, President, Chief Executive Officer and Director
James E. Deason	55	Executive Vice President, Chief Financial Officer, Secretary and Director
Keith I. Weil	45	Senior Vice President, Tubing Products
Johann R. Manning, Jr.	42	Senior Vice President, Fabricated Products and General Counsel
Massoud Neshan	49	Senior Vice President, Technology
Garry K. Johnson	47	Senior Vice President, Sales
Thomas A. Morton	49	Vice President of Purchasing and Logistics
Samuel A. Patterson	36	Corporate Controller
Allen E. Dillard	43	Treasurer and Director of Corporate Communications

Dennis J. Horowitz has been the President and Chief Executive Officer and a director of our company since March 1998, and in January of 2001 he also became Chairman of the Board of Directors. Prior to joining our company, Mr. Horowitz served as Corporate Vice President and President of the Americas of AMP Incorporated, a high technology electric connector and

interconnection systems company, since September 1994. Mr. Horowitz also serves as a director of Aerovox Incorporated and Superconductor Technologies, Inc.

James E. Deason has been a director of our company since October 1995. Mr. Deason has been the Executive Vice President, Chief Financial Officer and Secretary of our company since September 1994. Prior to joining our company, Mr. Deason, a Certified Public Accountant, spent 19 years with Ernst & Young LLP and was a partner from 1988 until he joined our company.

Keith I. Weil has been the Senior Vice President, Tubing Products, of our company since December 1998. Prior to joining our company, Mr. Weil had been a Global Business Executive and General Manager Consumer/Commercial for AMP Incorporated since 1996. Prior to 1996, Mr. Weil was employed by Philips Electronics NV for fourteen years in positions that included President of Graner Company (a division of Philips), General Manager of Philips Circuit Assemblies and Vice President of Marketing for Philips Broadband.

Johann R. Manning, Jr. has been the Senior Vice President, Fabricated Products and General Counsel of our company since October 2001. He previously held the position of Senior Vice President of Human Resources and General Counsel from May 2000 until September 2001 and Vice President of Human Resources and General Counsel from May 1998 until April 2000. Prior to joining our company, Mr. Manning had served as Senior Counsel for Mercedes-Benz U.S. International, Inc., a vehicle manufacturer, since March 1998. Prior to joining Mercedes-Benz, Mr. Manning was employed for over eight years with Genuine Parts Company, a diversified wholesale distribution company, where he held various positions including Vice President of Human Resources and Corporate Counsel for its Motion Industries, Inc. subsidiary.

Massoud Neshan has been the Senior Vice President, Technology of our company since August 1999. Prior to joining our company, Mr. Neshan had served as Vice President of Engineering and Research and Development for Hill Phoenix, a subsidiary of The Dover Corporation, since March 1996. Prior to joining Hill Phoenix, Mr. Neshan was employed for six years with Nax Corporation where he held the position of Executive Vice President. Mr. Neshan has spent his entire career in the heating, ventilation, air conditioning/refrigeration industry.

Garry K. Johnson has been the Senior Vice President, Sales of our company since 2002. He previously held the positions of Vice President, Sales from 1998 until 2002, Industrial Marketing Manager from 1990 until 1998, Field Sales Representative from 1981 until 1990 and Production Supervisor from 1979 until 1981. Mr. Johnson has been employed by our company for twenty-four years.

Thomas A. Morton has been the Vice President of Purchasing and Logistics since February 1999. He previously held the positions for our Canadian operations of Metal Manager from January 1996 until January 1999 and Corporate Controller from May 1989 to December 1996. Prior to joining our company, Mr. Morton, a Certified Public Accountant, was employed for ten years with Ernst & Young in Canada.

Samuel A. Patterson has been the Corporate Controller of our company since September 2000. He previously held the position of Director of Corporate Accounting from August 1999 until August 2000 and Corporate Accounting Manager from January 1998 until July 1999. Prior to joining our company, Mr. Patterson, a Certified Public Accountant, had served as Accounting

Manager and Division Controller for United Chair Company, a subsidiary of Haworth, Inc., since May 1997.

Allen E. Dillard has been the Treasurer and Director of Corporate Communications of our company since April 2002. Prior to joining our company, Mr. Dillard, a Certified Public Accountant, had served as a consultant to our company from January 2002 to March 2002. Prior to that time, Mr. Dillard was employed from March 2000 to December 2001 with Phyve Corporation where he held the position of Executive Vice President and Chief Financial Officer. From March 1994 to February 2000, Mr. Dillard was employed with Nichols Research Corporation, where he held the positions of Corporate Vice President, Treasurer and Chief Financial Officer.

ITEM 2

PROPERTIES

United States Facilities

We own and operate each of the U.S. facilities described below, with the exception of our Altoona, Pennsylvania facility that is partially owned and partially leased from a local industrial development agency for \$3,500 per year in perpetuity:

Location	Property Size (acres)	Plant Size (square feet)	Year <u>Opened</u>	Number of Employees at Dec. 31, 2002	<u>Description</u>
Decatur, AL	166	620,000	1948	850	Produces a majority of our copper tube product lines. A significant portion of production is industrial and technical tube. Produces smooth feedstock tube for the Ardmore, Altoona and Booneville facilities. Also houses a portion of our corporate staff.
Shawnee, OK	51	309,000	1974	465	Produces a majority of our copper tube product lines. Capable of producing feedstock tube for the Ardmore and Carrollton facilities.
Jackson, TN	35	240,000	1998	64	Produces welded copper enhanced surface tube. Also houses a U.S. wholesale product distribution center.
Altoona, PA	32	210,000	1956	282	A redraw facility that produces higher value added commercial products and specialty fabricated components.
Carrollton, TX	9	165,000	1999	295	A fabrication facility that produces higher- margin commercial products such as specialty fabricated parts, return bends and manifolds.
Booneville, MS	30	152,000	1989	143	Processes feedstock tube from the Decatur facility into enhanced surface industrial tube and technical copper tube. Produces feedstock for the Carrollton facility.
Warwick, RI	3	70,000	1978	145	Produces brazing filler metals, fluxes and other specialty alloys.
Ardmore, TN	6	65,000	1974	81	A redraw facility that produces higher margin commercial products such as capillary tube and specialty fabricated components, as well as aluminum tubing.

In addition to the manufacturing facilities described above, we also have a 232,000 square foot facility in Roxboro, North Carolina that is not being used for production and is currently held for sale. Our corporate offices, with 32 employees at December 31, 2002, are comprised of approximately 15,000 square feet in a leased facility in Huntsville, Alabama.

Canadian Facilities

We own and operate the following Canadian manufacturing facilities:

Location	Property Size (acres)	Plant Size (square feet)	Year <u>Opened</u>	Number of Employees at Dec. 31, 2002	<u>Description</u>
Montreal, Quebec	25	424,000	1942	377	Produces plumbing tube and refrigeration service tube, copper and copper alloy tube and copper and copper alloy rod and bar, wire and extruded shapes.
London, Ontario	45	195,000	1958	292	Produces plumbing tube, refrigeration service tube and industrial tube. Also houses corporate offices for Wolverine Tube (Canada) Inc.

We lease a 45,000 square foot warehouse in London, Ontario. Additionally, we have a 150,000 square foot facility in Fergus, Ontario whose operations are discontinued and that is currently held for sale.

Other Facilities

We own a 33,000 square foot technical tube facility in Esposende, Portugal. Our Shanghai, China facility is leased from the Shanghai Waigaoqiao Free Trade Zone 3-U Development Co., Ltd. for a twelve-year term. The following table describes our facilities in China and Portugal:

Location	Property Size (acres)	Plant Size (square feet)	Year Opened	Number of Employees at Dec. 31, 2002	Description
Shanghai, China	3	60,000	1998	107	Produces technical copper tube from feedstock supplied by local copper tube manufacturers and brazed assemblies from components supplied from the Carrollton facility.
Esposende, Portugal	3	33,000	2001	56	Produces technical copper tube from feedstock supplied by the Decatur facility and local copper tube manufacturers.

We also lease a facility in Apeldoorn, The Netherlands, comprised of a 16,000 square foot warehouse and 3,000 square feet of office space. There were ten employees at the Apeldoorn facility at December 31, 2002.

LEGAL PROCEEDINGS

ITEM 3

Our facilities and operations are subject to extensive environmental laws and regulations, and we are currently involved in various proceedings relating to environmental matters as described under "Management's Discussion and Analysis of Financial Condition and Results of Operations – Environmental". We are not involved in any legal proceeding that we believe could have a material adverse effect upon our business, operating results or financial condition.

In 2001, we became aware of three competition-related investigations involving the copper fittings industry and the copper tube industry. The European Commission initiated an investigation of producers of copper fittings and tubes in the European Union, contending that certain companies participated in mutual agreements and/or common procedures. In addition, the Commission of Competition for Canada issued a court order for the production of records to a number of producers and distributors of copper fittings. We have not been contacted in respect of, or otherwise received any information that would indicate that we are involved in, either of these investigations.

In the United States, a Grand Jury in the Northern District of Indiana has undertaken an investigation into possible violations of U.S. antitrust laws in the copper fittings industry and the copper tube industry. In March 2001, we received a subpoena for documents in connection with this investigation. In the first quarter of 2002, we completed production of documents we believed to be responsive to this subpoena. We understand this to be an industry-wide investigation and that most U.S. manufacturers of copper fittings and most of our competition in the copper tube industry in the United States have also received subpoenas relating to this investigation.

To our knowledge, no allegations or claims have been made against us and we are neither a target nor the subject of any investigation relating to these matters. With respect to any matters relating to the copper fittings industry, we do not participate in that industry. We believe that our operations, policies and practices are in compliance with the requirements of the U.S. antitrust laws and competition laws in other jurisdictions where we do business. However, we are unable to predict the scope or outcome of the investigations or the extent, if any, to which our business, financial condition or operations may be affected by these matters.

ITEM 4

SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of security holders by the Company during the final quarter of the fiscal year covered by this report.

PART II

ITEM 5

MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our Common Stock is traded on the New York Stock Exchange under the symbol "WLV." As of March 7, 2003, there were 12,262,439 shares of common stock outstanding, held by 290 shareholders of record.

The following table sets forth, for the periods indicated, the range of high and low reported sale prices for our Common Stock on the New York Stock Exchange:

	20	002	2001	
Period	High	Low	High	Low
First Quarter	\$12.15	\$6.20	\$14.35	\$10.80
Second Quarter	9.61	7.20	17.65	12.25
Third Quarter	7.60	5.30	17.65	9.84
Fourth Quarter	6.15	4.90	13.50	9.86

We did not declare or pay cash dividends on our Common Stock during the years ended December 31, 2002, 2001 or 2000. We do not currently plan to pay cash dividends on our Common Stock. In the foreseeable future, any future determination to pay cash dividends will depend on our results of operations, financial condition, contractual restrictions and other factors deemed relevant by the Board of Directors. We intend to retain earnings to support the growth of our business. In addition, our credit agreement and note indentures permit us to pay dividends on the Common Stock only if certain financial and other tests are met.

ITEM 6

SELECTED FINANCIAL DATA

The historical consolidated financial data presented below should be read in conjunction with the information set forth under "Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Consolidated Financial Statements of our company beginning on page F-1.

The balance sheet data presented below as of December 31, 2002 and 2001 and the income statement data presented below for each of the years in the three-year period ended December 31, 2002, are derived from the audited Consolidated Financial Statements of our company beginning on page F-1. The other balance sheet and income statement data presented below are derived from audited Consolidated Financial Statements of our company, which are not presented herein.

	Year Ended December 31,				
Statement of Operations Data:	2002	2001	2000	1999	1998
(In thousands, except per share amounts)					
Net sales	\$550,523	\$583,114	\$621,464	\$586,202	\$579,234
Cost of goods sold (a)	492,082	520,874	536,351	522,589	508,222
Gross profit	58,441	62,240	85,113	63,613	71,012
Selling, general and administrative expenses	30,616	32,254	31,961	30,314	25,453
Restructuring and other charges (b)	-	1,546	-	19,938	11,867
Operating income from continuing operations	27,825	28,440	53,152	13,361	33,692
Other (income) expenses:					
Interest expense, net	19,681	13,100	12,168	12,237	6,566
Gain on extinguishment of debt	(1,349)	-	· <u>-</u>	· -	-
Amortization and other, net	1,008	(447)	417	1,705	838
Income (loss) from continuing operations before income					
taxes	8,485	15,787	40,567	(581)	26,288
Income tax provision (benefit)	1,315	4,345	14,660	(988)	9,092
Income from continuing operations (c)	7,170	11.442	25,907	407	17,196
Income (loss) from discontinued operations, net of tax (d)	(1,610)	(31,240)	782	1,362	1,314
Cumulative effect of accounting change, net of income tax	(1,010)	(31,210)	, 02	1,502	1,51.
benefit (e)	_	_	_	(5,754)	_
Net income (loss) (f)	\$5,560	(\$19,798)	\$26,689	(\$3,985)	\$18,510
Net income (loss) applicable to common shares (g)	\$5,502	(\$20,078)	\$26,409	(\$4,265)	\$18,230
Earnings per common share-basic: Income from continuing operations Income (loss) from discontinued operations, net of tax Cumulative effect of accounting change	\$0.58 (0.13)	\$0.92 (2.58)	\$2.11 0.06	\$0.01 0.10 (0.44)	\$1.21 0.09
Net income (loss) per share	\$0.45	(\$1.66)	\$2.17	(\$0.33)	\$1.30
Basic weighted average common shares	12,231	12,077	12,153	13,106	14,025
Earnings per common share-diluted:	12,231		12,133	13,100	14,025
Income from continuing operations	\$0.58	\$0.91	\$2.08	\$0.01	\$1.19
Income (loss) from discontinued operations, net of tax	(0.13)	(2.54)	0.06	0.10	0.09
Cumulative effect of accounting change	-	<u>-</u>		(0.43)	
Net income (loss) per share	\$0.45	(\$1.63)	\$2.14	(\$0.32)	\$1.28
Diluted weighted average common and common				12.242	11105
equivalent shares	12,362	12,307	12,344	13,243	14,186
		Ye	ar Ended Decemb	er 31,	
Other Data:	2002	2001	2000	1999	1998
(In thousands, except per pound amounts)					
Pounds shipped	310,240	308,177	334,846	338,559	326,569
Depreciation and amortization	18,416	\$18,679	\$17,040	\$15,773	\$16,665
Capital expenditures	7,747	27,612	31,676	23,092	34,293
Average COMEX price of copper per pound (h)	0.72	0.73	0.84	0.72	0.75

			December 31,		
Balance Sheet Data:	2002	2001	2000	1999	1998
(In thousands)					
Total assets	\$550,720	\$539,427	\$584,937	\$499,550	\$541,510
Total long-term debt	255,712	247,698	231,163	180,197	217,871
Redeemable cumulative preferred stock	-	2,000	2,000	2,000	2,000
Stockholders' equity	\$200,635	\$201,412	\$228,449	\$212,499	\$226,512

- (a) During 2001, 1999 and 1998, we incurred unusual charges that are included in cost of goods sold of approximately \$1.4 million, \$5.4 million and \$2.1 million, respectively. The 2001 charge of \$1.4 million was related to realized and anticipated reductions in demand for our product and was for the write-down of slow moving or obsolete inventory. The 1999 charge was \$5.4 million and included \$3.7 million related to obsolete inventory, \$0.8 million net book value of idled and obsolete machinery and equipment and \$0.9 million of other charges related to the realignment of our manufacturing operations. The 1998 charge included \$0.5 million of obsolete inventory and \$0.9 million of other costs associated with the closing of our Greenville, Mississippi facility and \$0.7 million of costs associated with the discontinuation of casting at our Roxboro, North Carolina facility.
- (b) We recognized restructuring and other charges of approximately \$1.5 million (\$1.0 million after tax) in 2001. See Note 21 of the Notes to Consolidated Financial Statements.

During 1999, we recognized restructuring and other charges of approximately \$19.9 million (\$12.5 million after tax). This charge included \$10.0 million in expenses relating to the announced closing of our Roxboro, North Carolina facility, of which \$8.6 million in expenses related to the write-down of impaired assets; \$2.8 million in expenses related to the implementation of an indirect workforce reduction program; \$3.6 million in expenses related to impaired assets as a result of relocating the Roxboro machinery and equipment to our other facilities and thereby displacing existing equipment; \$1.9 million in expenses related to previously closed facilities, of which \$1.8 million related to the write-down of impaired assets; \$0.8 million in expenses related to the termination of an interest rate swap; and \$0.8 million in professional fees and other costs primarily associated with acquisitions that were not completed.

During 1998, we recorded restructuring and other charges of approximately \$11.9 million (\$7.5 million after tax). This charge included \$7.4 million in expenses related to the closing of our Greenville, Mississippi facility, of which \$5.6 million in expenses related to the write-down of impaired assets resulting primarily from the closing of this facility; \$2.3 million in expenses for the write-down of impaired assets related to the discontinuation of casting at our North Carolina facility; \$0.4 million of other costs related to the discontinuation of the casting process at the North Carolina facility; \$0.9 million in expenses related to the implementation of a salaried workforce reduction program; and \$0.9 million in professional fees and other costs primarily associated with an acquisition that was not completed.

- (c) Income from continuing operations for 2001, 2000, 1999 and 1998, adjusted to exclude amortization of expense recognized related to goodwill would have been \$14.1 million, \$28.2 million, \$2.6 million and \$18.7 million.
- (d) We have classified the operating results of Wolverine Ratcliffs, Inc., equal to (\$1.6) million, (\$7.3) million, \$0.8 million, \$1.4 million and \$1.3 million (in each case net of tax) for the years ended 2002, 2001, 2000, 1999 and 1998, respectively, as discontinued operations and, in addition, we recorded an estimated \$23.9 million (net of tax) loss on the disposal of the Wolverine Ratcliffs operations in 2001. See Note 2 of the Notes to Consolidated Financial Statements.
- (e) Effective January 1, 1999, we adopted Statement of Position 98-5, "Reporting on the Costs of Start-Up Activities", or SOP 98-5, which requires that costs related to start-up activities be expensed as incurred. The cumulative effect of adopting SOP 98-5 as of the beginning of 1999 was a charge of \$5.8 million, net of tax.
- (f) Net income (loss) for 2001, 2000, 1999 and 1998 adjusted to exclude amortization expense related to goodwill would have been \$(16.9) million, \$29.2 million, \$(1.7) million and \$20.0 million.
- (g) Reflects the payment of preferred stock dividends and accretion of preferred stock redemption requirements.
- (h) Source: Metals Week.

ITEM 7 MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is a discussion of our results of operations and financial condition. This discussion should be read in conjunction with our Consolidated Financial Statements and notes thereto.

Gemeral

The following general factors should be considered in analyzing our results of operations:

Critical Accounting Policies and Estimates

We base this discussion and analysis of results of operations, cash flow and financial condition on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. When we prepare these financial statements, we make estimates and judgments that affect the amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities that we report. On an on-going basis, we evaluate our estimates, including but not limited to those affecting allowances for doubtful accounts, inventories, intangible assets, long-lived assets, income taxes, restructuring reserves, medical, dental and workers' compensation benefits, pensions and other post-retirement benefits, environmental and other contingencies and litigation. We consider market conditions, customers' demand for our products, historical trends and various other factors when we make judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from these estimates when different assumptions or conditions are considered. We believe the accounting policies critical to the presentation and understanding of our financial condition and results of operations and involving the more significant judgments and estimates relate to inventory, long-lived assets, income taxes and retirement and pension plans.

Inventory

We state our raw materials, work-in-process and finished goods inventories at the lower of first-in, first-out cost or market. In assessing the ultimate realization of inventories, we are required to make judgments as to future demand requirements and compare these with our current inventory levels. We reduce the inventory that we report on our financial statements for estimated obsolescence or unmarketable inventory as our projected demand requirements decrease due to market conditions, technological and product life cycle changes and longer than previously expected usage periods. The amount of this reduction is equal to the cost of our inventory less the estimated market value of our inventory. We estimate market value based on assumptions about future demand and market conditions.

Long-lived assets

We periodically review the values assigned to long-lived assets such as property, plant and equipment, assets held for sale and goodwill. We estimate the depreciable lives of property, plant and equipment and review the assets for impairment if events or changes in circumstances indicate that we may not recover the carrying amount of an asset.

Assets held for sale include the net assets of our unoccupied Roxboro, North Carolina facility and the net property, plant and equipment of Wolverine Ratcliffs, Inc., whose operations we decided to discontinue in 2001. These assets have been written down to estimated fair value less estimated cost to sell. We have estimated the carrying value for these assets based on our projections of the net realizable value from the sale of these assets and in light of their appraised values. Although we believe we have appropriately reduced the carrying values of all assets held for sale to their estimated recoverable amounts, net of disposal costs where appropriate, actual results could be different and our results of operations in future periods could reflect gains or losses on these assets.

On January 1, 2002, we adopted Statement of Financial Accounting Standards, (SFAS) No. 142, Goodwill and Other Intangible Assets. Accordingly, we ceased amortizing all previously recorded goodwill as of that date. A transitional impairment test of all goodwill was required within six months of adopting SFAS No. 142. We completed the transitional impairment test of goodwill (as of January 1, 2002) required by the new rules during the second quarter of 2002. Based on the results of these tests, the fair value of the tested business units exceeded the carrying value of those business units and thus no transitional impairment charge was recorded. We conducted the required annual goodwill impairment review during the fourth quarter of 2002. Updated valuations were computed using a discounted cash flow approach based on forward-looking information regarding market share, revenues and costs for each business unit. Our valuation was based on a 4% to 5% long-term growth rate, a discount rate of 12% and two reporting units, The Tube Group and The Non-Tube Group. The Tube Group consists of our Decatur, Shawnee, Jackson, Booneville, Montreal, London, Shanghai and Esposende facilities for which we have \$23.2 million of goodwill. The Non-Tube Group consists of our Altoona, Carrollton, Warwick, Ardmore and Apeldoorn facilities for which we have \$76.9 million of goodwill. Based on the results of this review, the fair value of the tested business units exceeded the carrying value of those business units and thus no impairment charge was recorded. If we are unable to achieve our estimated growth rates and profit projections, if interest rates increase or if our other estimates or their related assumptions change in the future, we may be required to record impairment charges for goodwill in the future.

Income taxes

We record the estimated future tax effects of temporary differences between the tax bases of assets and liabilities and the amounts reported in our consolidated balance sheets, as well as operating loss and tax credit carryforwards. The carrying value of our net deferred tax liability reflects our assumption that we will be able to generate sufficient future taxable income to realize our deferred tax assets. As of December 31, 2002, we have \$5.6 million of deferred tax assets resulting from state operating loss and tax credit carryforwards that are available to reduce taxable income in future periods, net of a \$2.4 million valuation allowance that we recorded in the fourth quarter of 2002. Under the provisions of SFAS No. 109, we considered the realization of these state carryforwards in light of our cumulative operating results for the current and preceding years in determining the valuation allowance, as well as reversing taxable temporary differences, future taxable income and ongoing prudent and feasible tax planning strategies. If our estimates and related assumptions regarding these factors change in the future, we may be required to record an additional valuation allowance against our deferred tax assets. This would result in additional income tax expense in our consolidated statement of operations.

In addition, we operate within multiple taxing jurisdictions and are subject to audit in these jurisdictions. These audits can involve complex issues, which may require an extended period of time to resolve. We believe adequate provision for income taxes has been made for any potential audits.

Pension and Postretirement Benefit Costs

We have significant pension and postretirement benefit costs and credits that are developed from actuarial valuations. Inherent in these valuations are key assumptions including discount rates and expected long-term rates of return on plan assets. Material changes in our pension and postretirement benefit costs may occur in the future due to changes in these assumptions, changes in the number of plan participants and changes in the level of benefits provided.

The discount rate is subject to change each year, consistent with changes in applicable high-quality, long-term corporate bond indices. Based on bond indices as of December 31, 2002, we used discount rates of 7.0% and 6.75% at December 31, 2002 for our U.S. and Canadian based plans, respectively, compared to 7.25% and 7.0% at December 31, 2001 for our U.S. and Canadian based plans, respectively. This had the effect of increasing our accumulated pension benefit obligation by approximately \$4.2 million for the year ended December 31, 2002 and increasing our estimated pension expense for 2003 by \$0.5 million.

The expected long-term rate of return on pension plan assets is selected by taking into account the expected duration of the projected benefit obligation for the plans, the asset mix of the plans and the fact that the plan assets are actively managed to mitigate downside risk. Based on these factors, our expected long-term rates of return are 9.0% and 7.5% at December 31, 2002 for our U.S. and Canadian based plans, respectively, compared to 9.5% and 8.5% at December 31, 2001 for our U.S. and Canadian based plans, respectively. This had the effect of increasing our estimated pension expense for 2003 by \$0.7 million.

Total estimated pension expense is expected to increase \$3.4 million in 2003 as compared to 2002 primarily due to the impact of the decline in fair value of plan assets as well as to the aforementioned changes in the discount rate and expected long-term rate of return.

On December 31, 2002, the accumulated benefit obligation related to our pension plans exceeded the fair value of pension plan assets. This difference is attributed to: (1) an increase in the accumulated benefit obligation that resulted from the decrease in the interest rate used to discount the projected benefit obligation to its present settlement amount; (2) an increase in the accumulated benefit obligation that resulted from the decrease in the expected long-term rate of return on pension plan assets; and (3) a decline in the fair value of the plan assets at December 31, 2002 due to a sharp overall decline in the equity markets. As a result, and in accordance with SFAS 87, we recognized an additional minimum pension liability of \$21.9 million, recorded a charge to accumulated other comprehensive loss before taxes of \$18.7 million and recognized an intangible asset of \$3.2 million up to the amount of unrecognized prior service cost.

Components of Cost of Goods Sold

The cost of raw materials, principally copper, is a substantial portion of our cost of goods sold. The rise and fall of copper prices and other metals affects the levels of our net sales, costs of goods sold and the carrying value of inventory, even in the absence of increases or decreases in

business activity. While we have entered into commodity forward contracts to sell copper in an effort to mitigate the impact of the rise and fall of copper prices on the valuation of our inventory, these forward contracts are not accounted for as effective hedges. Thus, the rise and fall of copper prices may impact our gross margin and may have a material impact on our levels of gross profit for a particular reporting period. However, across reporting periods, we believe that the cost of raw materials is generally passed along to our customers.

Variability of Wholesale Product Gross Profit

Gross profit attributable to sales of our wholesale products has fluctuated and may continue to fluctuate substantially from period to period. Gross profit from sales of these products was \$4.4 million in 2002, \$9.3 million in 2001 and \$12.6 million in 2000. Gross profit derived from the sale of wholesale products is mainly affected by changes in selling prices. Selling prices for these products are affected principally by general economic conditions, especially the rate of housing starts, general commercial building activity, industry competition and manufacturing capacity, industry production levels and other market factors. All of these factors are beyond our control.

Impact of Product Mix

Our products range from higher value-added and higher margin commercial products to commodity-type products such as wholesale tube products and rod and bar products. Our overall profitability from period to period is affected by the mix of sales within these categories. We have substantial sales in Canada, and our product mix in that market, as compared to the U.S. market, reflects a much higher percentage of our commodity-type products.

Cyclical and Seasonal Nature of Demand

Demand for our products, particularly our wholesale products, is cyclical and is significantly affected by changes in general economic conditions that affect our customers' markets. Demand in some industries to which we sell, including the residential air conditioning industry and, to a lesser extent, the commercial air conditioning industry, is also seasonal. Our sales to the residential air conditioning market are generally greater in the first and second quarters of the year and lower in the third and fourth quarters because manufacturers typically increase inventories in the early part of the year in anticipation of summer air conditioning sales and housing starts. In addition, sales of industrial tube are adversely affected in years with unusually cool summers.

Discontinued Operations

During the year ended December 31, 2001, we decided to discontinue the operations of Wolverine Ratcliffs, Inc. ("WRI"), which were previously included in the rod, bar and other products segment. As of December 31, 2001, we held a 74.5% ownership interest in this business. We subsequently acquired the remaining 25.5% interest in WRI and in July 2002, we merged WRI into Wolverine Tube (Canada), Inc. to facilitate the liquidation of the business. Accordingly, the operating results of WRI have been reported in discontinued operations in the consolidated financial statements. In the fourth quarter of 2001, we recorded a \$31.5 million (\$23.9 million after tax) estimated loss on the disposal of the WRI operations, which included a \$2.5 million (\$1.6 million after tax) provision for estimated losses during the expected phase-out period. In 2002, we engaged a financial advisor to pursue opportunities to dispose of the

business as a going concern but were not able to do so and thus commenced liquidation of the business. As of June 30, 2002, all manufacturing operations of WRI were stopped and its inventory was substantially liquidated. As of September 29, 2002 we had liquidated substantially all of the net receivables, and had begun the equipment liquidation process. We are continuing to pursue opportunities to dispose of the remainder of the equipment and the building. In the fourth quarter of 2002, we recorded a \$2.5 million (\$1.6 million after tax) loss from discontinued operations for remaining estimated closing costs in excess of the provision for losses recorded in the fourth quarter of 2001. We have realized approximately \$10 million of pretax proceeds from the realization or sale of the assets of the business, net of our cash payments to settle the liabilities of the discontinued operations during the twelve months ended December 31, 2002, the majority of which is recorded in continuing operations in that certain accounts receivable and inventories were transferred to continuing operations. As is reflected on the Consolidated Statements of Cash Flows, discontinued operations used \$2.0 million of cash, consisting of a \$1.5 million net use of cash from operations and the sale of assets and \$0.5 million of additions to property, plant and equipment. To the extent actual results should differ from our estimates, the difference will be reported in discontinued operations in future periods.

Operating results of the discontinued WRI operations for 2002, which were charged to previously established reserves, 2001 and 2000 are as follows:

	2002	2001	2000
(In thousands)			"-
Net sales	\$12,063	\$48,886	\$79,875
Income (loss) before income tax benefit	\$(3,209)	\$(11,882)	\$1,289
Income tax provision (benefit)	(851)	(4,507)	507
Net income (loss)	\$(2,358)	\$(7,375)	\$782

Assets and liabilities of the discontinued WRI operations have been reflected in the consolidated balance sheets as current or non-current based on the original classification of these accounts, net of any necessary valuation allowances, except that property, plant and equipment to be disposed in the amount of \$3.4 million, net of a necessary valuation allowance, have been included in "assets held for sale." Although we believe we have appropriately reduced the carrying value of the assets to their estimated recoverable amounts, net of disposal costs where appropriate, actual results could be different and the difference will be reported in discontinued operations in future periods.

Net assets (liabilities) of the discontinued WRI operations are as follows:

	December 31, 2002	December 31, 2001
(In thousands)		
Cash and equivalents	\$44	\$2,165
Other current assets	880	11,996
Assets held for sale	3,363	3,691
Deferred income taxes	-	11,935
Other assets	122	192
Current liabilities	(5,218)	(12,626)
Other liabilities	-	(75)
Net assets (liabilities) of discontinued operations	\$(809)	\$17,278

Results of Continuing Operations

Year-Ended December 31, 2002, Compared with Year-Ended December 31, 2001

Consolidated net sales from continuing operations decreased by \$32.6 million, or 5.6%, to \$550.5 million for the year ended December 31, 2002 from \$583.1 million for the year ended December 31, 2001. Pounds shipped increased by 2.1 million pounds, or 0.7%, to 310.2 million in 2002 from 308.2 million in 2001. The average COMEX copper price for 2002 was \$0.72 per pound, as compared to \$0.73 per pound in 2001.

Pounds of commercial products shipped decreased by 0.7 million pounds, or 0.3%, to 209.6 million in 2002 from 210.3 million in 2001. This decrease in shipments was primarily due to decreased shipments of technical tube and to a much lesser extent, decreased shipments of alloy tube. Shipments of industrial tube and fabricated products increased in 2002 as compared to 2001. Sales of commercial products decreased \$23.0 million, or 5.2%, to \$421.2 million in 2002 from \$444.2 million in 2001. This decrease in sales was attributable to decreased fabrication revenues, primarily related to lower volumes of technical tube, modest selling price decreases and a decrease in average COMEX copper prices in 2002. Gross profit from commercial products increased by \$1.6 million, or 3.2%, to \$51.7 million in 2002 from \$50.1 million in 2001. The improvement in gross profit for commercial products, despite lower volumes and modest selling price decreases, is primarily attributable to cost reductions and improved manufacturing efficiencies.

Pounds of wholesale products shipped increased by 2.7 million pounds, or 3.6%, to 79.1 million in 2002 from 76.3 million in 2001. Sales of wholesale products decreased by \$3.6 million, or 3.7%, to \$93.9 million in 2002 from \$97.6 million in 2001, due to a reduction in selling prices in excess of 20% in this highly competitive commodity market, as well as a decrease in average COMEX copper prices in 2002. Gross profit from wholesale products decreased \$5.0 million, or 53.3%, to \$4.4 million in 2002 from \$9.3 million in 2001, due primarily to the reduction in selling prices.

Pounds of rod, bar and other products shipped remained basically flat in 2002 as compared to 2001, increasing by 0.1 million pounds, or 0.2%, to 21.6 million in 2002 from 21.5 million in 2001. Sales of rod, bar and other products decreased \$6.0 million, or 14.5%, to \$35.4 million in 2002 from \$41.3 million in 2001, primarily reflecting a reduction in sales from our distribution center in The Netherlands. Gross profit from rod, bar and other products decreased \$0.4 million, or 15.2%, to \$2.4 million in 2002 from \$2.8 million in 2001, due to the reduction in sales from our Netherlands distribution center.

Consolidated gross profit decreased \$3.8 million, or 6.1%, to \$58.4 million in 2002 from \$62.2 million in 2001. Gross profit in 2002 decreased primarily due to selling price reductions related to wholesale products and to a lesser extent commercial products, as well as lower shipments of technical tube, the impact of which was somewhat mitigated by our cost reduction initiatives and efficiency gains.

Consolidated selling, general and administrative expenses for the year ended December 31, 2002 decreased by \$1.6 million, or 5.1%, to \$30.6 million, from \$32.3 million in 2001. Consolidated selling, general and administrative expenses were approximately five percent of sales for both 2002 and 2001. Excluding \$2.3 million of amortization of goodwill in 2001, selling, general and administrative expenses in 2001 were \$30.0 million. Selling, general and administrative expenses increased approximately 2.0% or \$0.6 million in 2002, primarily due to an \$0.8 million increase in charges for legal and other professional fees associated with various tax strategies and corporate structures and environmental consulting, net of recoveries from an insurance settlement.

Operating income from continuing operations decreased by \$0.6 million, or 2.0% to \$27.8 million for the year ended December 31, 2002, from \$28.4 million in 2001 primarily due to selling price reductions related to wholesale products and to a lesser extent commercial products, as well as lower shipments of technical tube, the impact of which was somewhat mitigated by our cost reduction initiatives and efficiency gains and a reduction in selling, general and administrative expenses. In 2001, restructuring and other charges of \$1.5 million were recognized, as described in the "Restructuring and Other Charges" section below.

Consolidated net interest expense increased \$6.6 million to \$19.7 million in 2002 from \$13.1 million in 2001. On March 27, 2002, we obtained new financing to replace our old revolving credit facility. We issued \$120 million in principal amount of 10.5% Senior Notes and concurrently, we entered into a new secured revolving credit facility. There was an average of \$24.9 million in outstanding borrowings under our revolving credit facilities during 2002 as compared to an average of \$86.7 million in outstanding borrowings under our old revolving credit facility during 2001. The average interest rate under our new and old revolving credit facilities was 4.8% for 2002 versus 5.5% under our old revolving credit facility in 2001. Interest expense in 2002 is net of interest income of \$0.5 million and capitalized interest of \$0.7 million, and interest expense in 2001 is net of interest income of \$0.6 million and capitalized interest of \$1.1 million. Interest expense is also net of interest income from loans to the discontinued operations of Wolverine Ratcliffs, Inc., which was \$0.8 million in 2002 and \$1.3 million in 2001. Interest expense was reduced \$0.3 million in 2002 as compared to 2001 from the benefit of our interest rate swap on \$50 million notional amount of our 7.375% Senior Notes which we entered into in the fourth quarter of 2002.

During the third and fourth quarters of 2002, we purchased \$13.2 million of our 7.375% Senior Notes in the open market at an average of 90% of face value and with an effective yield of 9.6% and \$2.0 million of our 10.5% Senior Notes at 95% of face value with an effective yield of 11.6%. We recorded a \$1.3 million gain from the extinguishment of these Senior Notes and will realize a \$1.2 million reduction in annualized interest expense in future years.

Amortization and other, net was \$1.0 million of expense in 2002, as compared to \$0.4 million of income in 2001. Amortization and other, net in 2001 included \$0.5 million of foreign currency gains. These foreign currency gains were largely attributable to fluctuations in the Canadian to U.S. dollar exchange rate. Amortization and other, net in 2002 included \$0.3 million of income related to the administration and collection of receivables sold to us by our discontinued operations as compared to \$0.6 million in 2001. Amortization expense in 2002 increased \$0.6 million to \$1.3 million compared to \$0.7 million in 2001 due to the deferred financing fees incurred when we obtained our new financing in March 2002.

The effective tax rate for continuing operations for 2002 was 15.5%, as compared to 27.5% in 2001. The substantially lower effective tax rate in 2002 reflects the favorable outcome of a tax audit in Canada that had been provided for and was concluded in 2002 as well as the situation wherein we generated tax benefits in higher effective tax rate jurisdictions, in which we had pretax losses, and accrued tax provisions in jurisdictions where the effective tax rates were lower due to tax incentives.

Consolidated income from continuing operations in 2002 decreased by \$4.3 million to \$7.2 million, or \$0.58 per diluted share, from \$11.4 million, or \$0.91 per diluted share, in 2001. Consolidated income from continuing operations for 2001 adjusted to exclude amortization expense recognized related to goodwill would have been \$14.1 million or \$1.13 per diluted share.

Year-Ended December 31, 2001, Compared with Year-Ended December 31, 2000

Consolidated net sales from continuing operations decreased by \$38.4 million, or 6.2%, to \$583.1 million for the year ended December 31, 2001 from \$621.5 million for the year ended December 31, 2000. Pounds shipped decreased by 26.7 million pounds, or 8.0%, to 308.2 million in 2001 from 334.8 million in 2000. The average COMEX copper price for 2001 was \$0.73 per pound, as compared to \$0.84 per pound in 2000.

Pounds of commercial products shipped decreased by 27.7 million pounds, or 11.6%, to 210.3 million in 2001 from 238.0 million in 2000. This decrease in shipments was primarily due to decreased demand for industrial tube used in the residential air conditioning industry, as well as decreased shipments of fabricated products and technical tube, reflecting a weak economy and a relatively cool summer in North America. Lower alloy tube shipments primarily resulted from our product rationalization efforts to enhance the operating results of this product by discontinuing some of our lower margin products. Sales of commercial products decreased \$43.2 million, or 8.9%, to \$444.2 million in 2001 from \$487.4 million in 2000. This decrease in sales was attributable to decreased fabrication revenues, primarily related to lower volumes of fabricated products, industrial tube, technical tube and alloy tube and lower average COMEX copper prices in 2001. The decrease in sales was partially offset by the addition of sales of metal

joining products for the full year of 2001 as compared to sales of metal joining products for only the last quarter of 2000. Gross profit from commercial products decreased by \$19.8 million, or 28.4%, to \$50.1 million in 2001 from \$70.0 million in 2000. The decrease in gross profit for commercial products was primarily attributable to decreased shipments of fabricated products, technical tube and industrial tube.

Pounds of wholesale products shipped increased by 8.5 million pounds, or 12.5%, to 76.3 million in 2001 from 67.8 million in 2000. We believe that shipments were positively impacted by an increase in housing starts and lower interest rates. Sales of wholesale products remained basically flat, increasing \$0.6 million, or 0.6%, to \$97.6 million in 2001 from \$97.0 million in 2000, reflecting aggressive and competitive pricing as well as lower average COMEX copper pricing in 2001. Gross profit from wholesale products decreased \$3.3 million, or 26.2%, to \$9.3 million in 2001 from \$12.6 million in 2000, due to an increase in the relative amount of our fixed costs attributed to this segment as sales volumes in other segments declined.

Pounds of rod, bar and other products shipped decreased by 7.4 million pounds, or 25.7%, to 21.5 million in 2001 from 29.0 million in 2000, primarily due to the weak economy which had a particularly negative impact on the heavy industrial applications of rod and bar products. Sales of rod, bar and other products increased \$4.3 million, or 11.6%, to \$41.3 million in 2001 from \$37.1 million in 2000. Sales increased approximately \$15.0 million due to sales generated by our distribution center in The Netherlands. This increase in sales was partially offset by a decrease in fabrication revenues for rod and bar products due to competitive pricing and a decrease in average COMEX copper pricing in 2001. Gross profit from rod, bar and other products increased \$0.3 million, or 11.5%, to \$2.8 million in 2001 from \$2.5 million in 2000, due to the operating results of the distribution center in The Netherlands offset by a decline in the volume of rod and bar products shipped.

Consolidated gross profit decreased \$22.9 million, or 26.9%, to \$62.2 million in 2001 from \$85.1 million in 2000. Gross profit in 2001 decreased primarily due to lower shipments of fabricated products, technical tube and industrial tube. Additionally, gross profit was negatively impacted by approximately \$3.4 million of higher healthcare costs and by approximately \$3.4 million in higher energy costs for 2001.

Consolidated selling, general and administrative expenses for the year ended December 31, 2001 remained relatively flat, increasing by \$0.3 million, or 0.9%, to \$32.3 million, from \$32.0 million in 2000. Consolidated selling, general and administrative expenses were approximately five percent of sales for both 2001 and 2000 and include \$2.8 million in 2001 and \$0.6 million in 2000 of the selling, general and administrative expenses of Wolverine Joining Technologies and the distribution center in The Netherlands, both of which we acquired in September 2000. Selling, general and administrative expenses in 2001 also include a \$1.5 million reduction in incentive compensation, partially offset by a \$1.0 million increase in legal expenses.

Operating income from continuing operations decreased \$24.8 million to \$28.4 million for the year ended December 31, 2001, from \$53.2 million in 2000. In 2001, restructuring and other charges of \$1.5 million were recognized, as described in the "Restructuring and Other Charges" section below.

Consolidated net interest expense increased \$0.9 million to \$13.1 million in 2001 from \$12.2 million in 2000. There was an average of \$86.7 million in outstanding borrowings and

obligations under our existing revolving credit facility during 2001 as compared to an average of \$46.7 million during 2000. This increase was attributable to the funding of our capital programs as well as our acquisition of Wolverine Joining Technologies in September 2000. The average interest rate under our existing revolving credit facility was 5.5% for 2001 versus 7.0% for 2000. Interest expense in 2001 is net of interest income of \$0.6 million and capitalized interest of \$1.1 million, and interest expense in 2000 is net of interest income of \$1.2 million and capitalized interest of \$1.3 million. Interest expense also is net of interest income from loans to the discontinued operations of Wolverine Ratcliffs, Inc., which was \$1.3 million in 2001 and \$0.5 million in 2000.

Amortization and other, net was \$0.4 million of income in 2001, as compared to \$0.4 million of expense in 2000. Amortization and other, net in 2001 included \$0.5 million of foreign currency gains, as compared to \$0.1 million of foreign currency gains in 2000. These foreign currency gains are largely attributable to fluctuations in the Canadian to U.S. dollar exchange rate. Amortization and other, net in 2001 also included \$0.6 million of income related to the administration and collection of receivables sold to us by our discontinued operations. Amortization expense was \$0.7 million in 2001, as compared to \$0.4 million in 2000.

The effective tax rate for continuing operations for 2001 was 27.5%, as compared to 36.1% in 2000. The decrease in the effective tax rate in 2001 resulted from more income from foreign tax jurisdictions, which had lower statutory tax rates. In particular, the tax rate for our operations in China was 0% in 2001 and 2000 reflecting our contractual tax holiday agreement with the Chinese government. Under this agreement, the tax rate will be increased to 7.5% beginning January 1, 2002 and will remain at this rate for the next three years, increasing in 2005 to a 15% maximum rate.

Consolidated income from continuing operations in 2001 decreased by \$14.5 million to \$11.4 million, or \$0.91 per diluted share, from \$25.9 million, or \$2.08 per diluted share, in 2000. Consolidated income from continuing operations in 2001 and 2000, adjusted to exclude amortization expense recognized related to goodwill would have been \$14.1 million, or \$1.13 per diluted share and \$28.2 million or \$2.27 per diluted share, respectively.

Restructuring and Other Charges

During the third quarter of 2001, we recognized restructuring and other charges of \$1.5 million (\$1.0 million net of tax). We accrued and charged to expense \$1.1 million for severance benefits for approximately 40 salaried and hourly employees. We offered a voluntary separation program to employees at several of our facilities due to lack of demand for these facilities' products, the criteria for which was dependent on the employee's age, job duties and years of service. We separated these employees in order to reduce costs for anticipated continued weakness in sales volumes and mix and anticipated reductions of capacity utilization. We also accrued and charged to expense a \$0.2 million write-off of impaired assets and \$0.2 million related to a previously closed facility. As of December 31, 2001, we had separated 40 employees. We paid approximately \$0.8 million and \$0.3 million in 2001 and 2002 respectively, related to this restructuring, and we anticipate no further obligations. We expect to realize approximately \$2.1 million or \$1.3 million after taxes in reduced salary and related expenses per year as a result of the restructuring.

Liquidity and Capital Resources

The primary sources of our liquidity for the years ended December 31, 2002, 2001 and 2000 were cash provided from continuing operating activities, net borrowings under our revolving credit facilities in 2001 and 2000, cash on hand at the beginning of each year, and \$118.5 million from the issuance of our 10.5% Senior Notes in 2002. The primary uses of our funds were \$98.4 million to repay our revolving credit facilities in 2002, investments in our property, plant and equipment in each year, the discontinued operations of Wolverine Ratcliffs, Inc. in each year, \$13.9 million to purchase our Senior Notes in the open market in 2002, \$8.7 million of financing fees related to the issuance of our 10.5% Senior Notes and new revolving credit facility in 2002, a \$5.0 million voluntary contribution to our U.S. pension plans and \$1.0 million related to the mandatory redemption of our preferred stock both in 2002, \$7.5 million to repurchase 0.5 million shares of our common stock in 2000 and \$43.9 million to acquire Wolverine Joining Technologies in 2000.

Net cash provided by continuing operating activities totaled \$41.4 million for 2002, \$26.6 million for 2001 and \$46.6 million for 2000. The net increase in operating cash flows in 2002 was primarily the result of a decrease in inventory in 2002 relative to 2001 due to the liquidation of the WRI inventory in 2002 and generally lower levels of business in 2002 as compared to 2001. The net reduction in operating cash flows in 2001 was primarily the result of less income in 2001 as compared to 2000 as well as the net reduction in accounts receivable and accounts payable in 2001 relative to 2000.

Capital expenditures for continuing operations were \$7.7 million in 2002, \$27.6 million in 2001 and \$31.7 million in 2000. The significant amount of capital expenditures in 2001 and 2000 for our Project 21 capital program temporarily reduced our requirements in 2002 for maintenance capital expenditures. We currently expect to spend approximately \$13 to \$17 million in 2003. Our capital expenditures include asset replacement, environmental compliance and asset improvement items.

In 2000, we purchased 537,600 shares of our outstanding common stock in the open market for \$7.5 million. The impact on diluted earnings per share of purchasing 2.2 million of our treasury shares over a three year period from 1998 to 2000, based on the weighted average borrowing rate under our applicable revolving credit facility and the effective U.S. tax rate of each year, is a favorable per share impact of \$0.03 for 2002, \$0.04 for 2001 and \$0.20 for 2000.

The ratio of current assets to current liabilities was 4.3 in 2002, 3.3 in 2001 and 3.1 in 2000, in each case calculated as of December 31. Our cash and cash equivalent balances as of December 31, 2002 and December 31, 2001 were \$53.9 million and \$22.7 million, respectively, of which \$31.5 million and \$22.7 million, respectively, were held by our facilities located outside of the United States. We believe that we would have to pay the differential between foreign taxes and U.S. taxes on funds located outside of the United States upon repatriating these funds to the United States. However, we do not anticipate having a need in the foreseeable future to repatriate these funds and accordingly have not accrued the differential tax liability.

With the borrowing availability under our secured revolving credit facility, our cash balances and anticipated cash flow from our continuing operations, we believe that we will be able to satisfy our existing working capital needs, interest obligations and capital expenditure requirements in 2003 and beyond. We will continue to monitor our cash balances and forecasted cash flows and

evaluate opportunities to purchase our Senior Notes in the open market. We will also evaluate in 2003 making non-mandatory cash contributions to our pension plans. In February of 2003, we transferred \$4.3 million to a rabbi trust to partially fund the vested benefit obligations to certain executives under our Supplemental Executive Retirement Plan.

We have summarized below our contractual obligations and commercial commitments as of December 31, 2002:

		Payments Due or Commitments Expiring In Pe							
(In thousands)	2003	2004	2005	2006	2007	After 2007	Total		
Contractual obligations:									
Short-term debt	\$1,217	\$ -	\$ -	\$ -	\$ -	\$ -	\$1,217		
Long-term debt	-	405	405	405	405	254,092	255,712		
Operating leases	3,505	2,846	2,057	934	583	1,600	11,525		
Commitments for capital expenditures	1,157	-	-	-		-	1,157		
Total contractual obligations	\$5,879	\$3,251	\$2,462	\$1,339	\$988	\$255,692	\$269,611		
Other commercial commitments:									
Standby letters of credit	\$5,553	-	•	_	_		\$5,553		

We have a precious metal leasing program for silver that is essentially a consignment inventory arrangement under which banks provide us with precious metals for a specified period for which we pay a fee. As of December 31, 2002, we had consigned 1.5 million troy ounces of silver approximating a market value of \$7.1 million based upon current silver prices. The associated fee for this arrangement is included in the operating lease amounts above.

New Financing Agreements

On March 27, 2002, we obtained new financing agreements to replace our old revolving credit facility which was scheduled to mature on April 30, 2002. We issued \$120 million in principal amount of 10.5% Senior Notes that will mature in 2009. We also entered into a new secured revolving credit facility concurrently with the closing of the 10.5% Senior Notes offering. The new revolving credit facility provides for up to a \$37.5 million line of credit dependent on the levels of and secured by our eligible accounts receivable and inventory. The new revolving credit facility provides for interest at the Eurodollar rate plus 2.5% or the U.S. base rate plus 1%. Commitment fees on the unused available portion of the facility are 0.5%. The new revolving credit facility matures on March 27, 2005.

Because we used proceeds from our new long-term financing agreements to refinance the current maturities on our old revolving credit facility, we have reclassified all outstanding borrowings

under our old facility as non-current in our consolidated balance sheet as of December 31, 2001. See Note 10 of the Notes to Consolidated Financial Statements.

As of December 31, 2002, we had no outstanding obligations under our secured revolving credit facility. We had approximately \$5.6 million of standby letters of credit outstanding that are collateralized with the secured revolving credit facility and approximately \$31.9 million (subject to a \$2 million excess availability requirement) in additional borrowing availability thereunder.

In the first quarter of 2003, we and our lenders executed an amendment to the secured revolving credit facility to change the minimum consolidated EBITDA requirement on a rolling four-quarter basis for each quarter of 2003 from \$50.0 million to \$40.0 million for the first three quarters of 2003 and \$42.0 million for the fourth quarter of 2003. The need for the amendment is due to a lack of improvement in market and economic conditions from what had been expected and in anticipation that violations of the minimum consolidated EBITDA covenant would occur. The minimum consolidated EBITDA requirement on a rolling four-quarter basis for each quarter of 2004 of \$55.0 million remains unchanged.

As of December 31, 2001 and 2000, we had \$97.9 million and \$81.4 million of outstanding obligations under our old revolving credit facility, approximately \$5.4 million and \$3.7 million of standby letters of credit outstanding that were collateralized with the old revolving credit facility, and approximately \$27.0 million and \$115.0 million in additional borrowing capacity available under our old revolving credit facility, respectively.

Interest Rate Swap Agreement

In October 2002, we completed an interest rate swap on \$50.0 million notional amount of our 7.375% Senior Notes. The terms of the interest rate swap are a semi-annual payment date of February 1 and August 1, a floating rate option of the six-month LIBOR rate plus a spread of 3.76% and a termination date of August 1, 2008.

The interest rate swap is accounted for in accordance with SFAS No. 133 (subsequently amended by SFAS No. 137 and 138) Accounting For Derivative Instruments and Hedging Activities as a fair value hedge and because the terms of the debt and the payments to be received on the swap coincide, the hedge is considered perfectly effective against the changes in the fair value of the debt over its term. The swap agreement was executed in order to (i) convert a portion of the Senior Notes fixed-rate debt into floating-rate debt; (ii) maintain a capital structure containing appropriate amounts of fixed and floating-rate debt; and (iii) reduce net interest payments and expense in the near-term. As of December 31, 2002, we recorded the fair market value of the interest rate swap of \$0.4 million as other assets with a corresponding increase to the hedged debt, with equal and offsetting unrealized gains and losses included in other income (expense), net. Interest payments are recognized through interest expense and are made and received on the first day of each February and August, commencing February 1, 2003 and ending on the maturity date. Since the interest rate is not known until the end of each semi-annual interest period, estimates are used during such period based upon published forward-looking LIBOR rates. Any differences between the estimated interest expense and the actual interest payment are recorded to interest expense at the end of each semi-annual interest period. The interest rate swap resulted in a reduction to interest expense in 2002 of \$0.3 million. We anticipate that the terms of the swap will reduce our interest expense in 2003 by approximately \$1.2 million assuming current rates as of December 31, 2002. Our obligations under this swap

agreement are secured on the same basis as our obligations under our three-year revolving credit facility.

Purchase of Senior Notes in the Open Market

During the third and fourth quarters of 2002, we purchased \$13.2 million of our 7.375% Senior Notes in the open market at an average of 90% of face value and with an effective yield of 9.6% and \$2.0 million of our 10.5% Senior Notes at 95% of face value with an effective yield of 11.6%. We recorded a \$1.3 million gain from the extinguishment of these Senior Notes and will realize a \$1.2 million reduction in annualized interest expense in future years.

Senior Notes Due 2009

In March 2002, we issued \$120.0 million in principal amount of our 10.5% Senior Notes. Our 10.5% Senior Notes were issued pursuant to an indenture, dated as of March 27, 2002, between us and Wachovia Bank, National Association (successor to First Union National Bank), as trustee. We used the net proceeds from the sale of our 10.5% Senior Notes to repay indebtedness under our old revolving credit facility that was terminated in March 2002. Our 10.5% Senior Notes:

have interest payment dates on April 1 and October 1 of each year, which commenced October 1, 2002;

are redeemable after the dates and at the prices (expressed in percentages of principal amount on the redemption date), as set forth below:

<u>Year</u>	<u>Percentage</u>
April 1, 2006	105.250%
April 1, 2007	102.625%
April 1, 2008 and thereafter	100.000%

are senior unsecured obligations and are equal priority in right of payment with any of our existing and future senior unsecured indebtedness;

are guaranteed by certain of our subsidiaries; and

are subject to the terms of the indenture governing our 10.5% Senior Notes, which contain certain covenants, including covenants that limit our ability to incur indebtedness, make certain restricted payments and dispose of certain assets.

Senior Notes Due 2008

In August 1998, we issued \$150.0 million in principal amount of our 7.375% Senior Notes. Our 7.375% Senior Notes were issued pursuant to an indenture, dated as of August 4, 1998, between us and Wachovia Bank, National Association (successor to First Union National Bank), as trustee. Our 7.375% Senior Notes:

have interest payment dates on February 1 and August 1 of each year, which commenced February 1, 1999;

are redeemable at our option at a redemption price equal to the greater of (a) 100% of the principal amount of our 7.375% Senior Notes to be redeemed, or (b) the sum of the present value of the remaining scheduled payments of principal and interest thereon from the redemption date to the maturity date, discounted to the redemption date on a semiannual basis at the Treasury Rate plus 25 basis points, plus, in each case, accrued interest thereon to the date of redemption;

are senior unsecured obligations and are equal priority in right of payment with any of our existing and future senior unsecured indebtedness;

are guaranteed by certain of our subsidiaries, all of which are also guarantors under the 10.5% Senior Notes issued in March 2002;

are subject to the terms of the indenture governing our 7.375% Senior Notes, which contains certain covenants that limit our ability to incur indebtedness secured by certain liens and to engage in sale/leaseback transactions.

Market Risks

We are exposed to various market risks, including changes in interest rates, commodity prices and foreign currency rates. Market risk is the potential loss arising from adverse changes in market rates and prices. We do not enter into derivatives or other financial instruments for trading or speculative purposes. In the ordinary course of business, we enter into various types of transactions involving financial instruments to manage and reduce the impact of changes in interest rates, commodity prices and foreign exchange rates.

Interest Rate Risk

The fair market value of long-term fixed interest rate debt is subject to interest rate risk. Generally, the fair market value of fixed interest rate debt will increase as interest rates fall and decrease as interest rates rise. The estimated fair value of our total long-term fixed interest rate debt as of December 31, 2002 was \$246.2 million, versus a carrying value of \$253.3 million. The estimated fair value of our total long-term fixed interest rate debt as of December 31, 2001 was \$127.5 million versus a carrying value of \$149.8 million. A 1% increase from prevailing interest rates would result in a decrease in fair value of this debt by approximately \$10.4 million as of December 31, 2002 and \$6.1 million as of December 31, 2001. The estimated fair market value of our debt is based upon the indicative bid price for our Senior Notes which approximates their trade value. The yield implicit in the value of the 7.375% Senior Notes is 9.24% and 9.99% for the 10.5% Senior Notes as of December 31, 2002.

In October 2002, we completed an interest rate swap on \$50 million notional amount of our 7.375% Senior Notes. The terms of the interest rate swap are semi-annual payment dates of February 1 and August 1, a floating rate option of the six-month LIBOR rate plus a spread of 3.76% and a termination date of August 1, 2008. As of December 31, 2002, we recorded the fair market value of the interest rate swap of \$0.4 million as other assets with a corresponding

increase to the hedged debt, with equal and offsetting unrealized gains and losses included in other income (expense), net.

Commodity Price Risk

In connection with the sale of some raw materials, principally copper, we have entered into commodity forward contracts as we deemed appropriate to reduce the risk of price increases with respect to both firm-price sale commitments and anticipated sales. These forward contracts are accounted for in accordance with SFAS No.133 (subsequently amended by SFAS No.137 and 138) Accounting For Derivative Instruments and Hedging Activities. As of December 31, 2002, we had entered into contracts hedging the raw material requirements for committed and anticipated future sales through March 2004 having a notional value of \$33.3 million. As of December 31, 2001, we had entered into contracts hedging the raw material requirements for committed and anticipated future sales through December 2003 having a notional value of \$46.1 million. The estimated fair value of these outstanding contracts was a liability of approximately (\$0.5) million as of December 31, 2002 and (\$2.7) million as of December 31, 2001. A 10.0% adverse change in commodity prices would decrease the estimated fair value of these outstanding contracts by \$3.3 million and \$4.2 million at December 31, 2002 and December 31, 2001, respectively.

In 2002, we entered into commodity forward contracts to sell copper in March 2003 with a notional value of \$24.4 million and in December 2003 with a notional value of \$10.6 million. We entered into these forward contracts in order to mitigate the impact of fluctuating copper prices with regard to the valuation of our inventory balances. These forward contracts were not designated as effective hedges and therefore they are marked to market each month with gains and losses recorded in cost of goods sold. The estimated fair value of these outstanding contracts was a gain of approximately \$0.8 million as of December 31, 2002. A 10.0% increase in commodity prices would decrease the estimated fair value of these outstanding contracts by \$3.6 million at December 31, 2002.

In connection with the purchase of natural gas, we have entered into commodity futures contracts for natural gas to reduce our risk of future price increases. These contracts are accounted for in accordance with SFAS No.133 and accordingly, realized gains and losses are recognized when the hedged natural gas purchases occur and are recognized in cost of goods sold. Gains and losses on natural gas futures contracts that are designated as cash flow hedges are recognized in comprehensive income until the anticipated natural gas purchase occurs or is no longer probable. As of December 31, 2002, we had commodity futures contracts to purchase natural gas for the period February 2003 through March 2003 with a notional amount of \$0.5 million and an unrealized gain of \$0.1 million, based on futures prices as of December 31, 2002. As of December 31, 2001, we had commodity futures contracts to purchase natural gas for the period February 2002 through October 2002 with a notional amount of \$1.4 million and an unrealized loss of \$0.2 million, based on futures prices as of December 31, 2001. The effect of a 10.0% adverse change in commodity prices as of December 31, 2002 for these futures contracts would result in a potential loss in fair value of approximately \$0.1 million.

Foreign Currency Risk

Some of our operations use foreign exchange forward contracts to hedge fixed purchase and sales commitments denominated in a foreign currency. Our foreign currency exposures relate

primarily to nonfunctional currency assets and liabilities denominated in Euros and British Pound Sterling.

We do not enter into forward exchange contracts for trading purposes. These forward contracts and the underlying hedged receivables and payables are carried at their fair values with any associated gains and losses recognized in current period earnings. We mitigate the risk that the parties with whom we enter into these over-the-counter agreements will fail to perform by only entering into agreements with major international financial institutions.

As of December 31, 2002, we had forward exchange contracts outstanding to purchase foreign currency with a notional amount of \$1.1 million and to sell foreign currency with a notional amount of \$1.2 million. As of December 31, 2002, we had an unrealized loss of \$0.1 million associated with these forward contracts. The potential loss in fair value for these forward contracts from a hypothetical 10.0% adverse change in quoted foreign currency exchange rates would be approximately \$0.2 million.

As of December 31, 2001, we had forward exchange contracts outstanding to purchase foreign currency with a notional amount of \$1.4 million and to sell foreign currency with a notional amount of \$1.0 million. As of December 31, 2001, we had an unrealized loss of \$9,334 associated with these forward contracts. The potential loss in fair value for these forward contracts from a hypothetical 10.0% adverse change in quoted foreign currency exchange rates would be approximately \$0.2 million.

Environmental

Our facilities and operations are subject to extensive environmental laws and regulations. During the year ended December 31, 2002, we spent approximately \$1.2 million on environmental matters, which include remediation costs, monitoring costs, legal and other costs. We had a reserve of \$1.5 million at December 31, 2002 for undiscounted environmental remediation costs which is reflected in our Condensed Consolidated Balance Sheet. We intend to spend approximately \$1.2 million for capital expenditures relating to environmental matters during 2003. Based upon currently available information, we believe that the costs of the environmental matters described below are not reasonably likely to have a material adverse effect on our business, financial condition or results of operations. However, actual costs related to environmental matters could differ materially from the amounts we estimated and accrued at December 31, 2002 and could result in additional exposure if these environmental matters are not resolved as anticipated.

Decatur, Alabama

In 1999, we negotiated a new Consent Order under Section 3008(h) of the Resource Conservation and Recovery Act. This order incorporated the Corrective Measures Study, commonly referred to as the CMS, submitted to the EPA regarding a waste burial site at the Decatur, Alabama facility. The order also included an upgrade to an existing chrome ground water remediation system. The CMS proposed current monitoring and site maintenance. The 2002 Annual Groundwater Monitoring and Effectiveness Report submitted to the EPA shows that the area of groundwater plume has receded significantly. The report also shows continued reductions in the concentration level of contamination. Both of these are attributed to the

effectiveness of the vacuum enhancement modifications made to the groundwater recovery system.

Part of the ground water contamination plume had previously been detected underneath a section of property not owned by us. There are monitoring wells and recovery wells on this property. However, these wells have not been activated because the level of contamination currently is below regulated levels. To date, we have not received or been threatened by any claim from the owner of this property. In December 2002, we took a sample from this property that indicated there were no longer detectable levels of chrome beyond our property boundary. If the owner of this property does make a claim, we could incur additional costs.

On May 31, 2001, the EPA ordered modifications to the previously approved CMS and operations and maintenance plan to include continued monitoring of the burial site and the development of a contingency plan if contamination is detected. In addition, the EPA requested that we have a deed restriction placed on the burial site area to restrict any future development. We filed a deed restriction on 4.35 acres of the 165 acre manufacturing facility site in February 2002. The cost to us to comply with the CMS, as currently approved, is not expected to have a material adverse effect on our business, financial condition or results of operations.

In July of 2000, we notified the Alabama Department of Environmental Management that we detected low levels of volatile organic compounds and petroleum hydrocarbons in the ground water at the Decatur, Alabama facility during the expansion of the facility. On June 13, 2001, we received a letter from the department stating that a preliminary assessment would be forthcoming which we have yet to receive from the department. We expect to further define the extent of any contamination and execute any necessary remedies in conjunction with the department's assessment. We may voluntarily institute a pump and treat system in order to begin remediation of the contamination.

The estimated remaining investigative, monitoring, remedial, legal and other costs related to the environmental matters of our Decatur, Alabama facility are \$0.6 million as of December 31, 2002.

Ardmore, Tennessee

On December 28, 1995, we entered into a Consent Order and Agreement with the Tennessee Division of Superfund, or Tennessee Division, relating to the Ardmore, Tennessee facility, under which we agreed to conduct a preliminary investigation on whether volatile organic compounds detected in and near the municipal drinking water supply are related to the Ardmore facility and, if necessary, to undertake an appropriate response. That investigation revealed contamination, including elevated concentrations of volatile organic compounds, in the soil in areas of the Ardmore facility and also revealed elevated levels of certain volatile organic compounds in the shallow residuum ground water zone at the Ardmore facility.

Under the terms of the order, we submitted a Remedial Investigation and Feasibility Study work plan, which was accepted by the Tennessee Division, and we have initiated this work plan. The Tennessee Division approved the Groundwater Assessment Plan as a supplement to the work plan, and additional groundwater sampling to determine the lateral and vertical extent of possible contamination began in July 2000. The data from the ground water assessment, the subsequent risk assessment and a preliminary review of remedial alternatives completed the work plan

portion of the project which was submitted to the Tennessee Division on April 26, 2002. The Tennessee Division responded with comments on the Remedial Investigation and Feasibility Study on November 8, 2002. We and our consultant are evaluating the comments and we anticipate responding to the Tennessee Division's comments by April 17, 2003. We continue the monitoring and analysis program in compliance with the consent agreement.

On June 13, 2001, we purchased 22 acres immediately north of the Ardmore facility because of the potential migration of ground water contamination to this property. We believe that owning the property will reduce both potential liability and long-term remediation costs. We are proposing to the Tennessee Division that an interim corrective measure be implemented at the facility. The interim measure will consist of a system to extract water and vapors from the areas of highest concentration. The system can be expanded to conduct additional remediation if required. Based on recent testing efforts at the facility and the available information, we preliminarily estimate as of December 31, 2002 that it will cost between \$0.5 million and \$3.0 million to complete the investigation and develop the remediation plans for this site.

The water currently delivered to residents by the municipality is treated prior to human consumption, and thus does not contain volatile organic compounds above acceptable drinking water standards. We do not know whether the municipality may have delivered untreated water to its water consumers. However, due to dilution with non-contaminated water, which we believe occurs in the operation of the municipal well system, we believe that it is unlikely that any consumer was exposed in the past to volatile organic compounds above acceptable drinking water standards. To date, we have not received or been threatened by any claim from the municipality or its residents with respect to the drinking water.

A report of a 1995 EPA site inspection of the Ardmore facility recommended further action for the site. We believe, however, that because the Tennessee Division is actively supervising an ongoing investigation of the Ardmore facility, it is unlikely that the EPA will intervene and take additional action. If the EPA should intervene, however, we could incur additional costs for any further investigation or remedial action required.

Greenville, Mississippi

Following our acquisition of the Greenville, Mississippi facility, a preliminary investigation disclosed certain volatile organic compounds in soil and ground water at the site. We entered into a consent agreement with the Mississippi Department of Environmental Quality on July 15, 1997. We began remediation efforts in the third quarter of 1997 and expected these efforts to last approximately three years. In February 2000, we submitted a report of remediation activities and were granted approval by the Mississippi department to cease active remediation and begin post-closure monitoring. However, there can be no assurance that the department will allow us to permanently discontinue remediation efforts, and operations, maintenance and other expenses of the remediation system may continue for a longer period of time. Through October 3, 1998, applicable costs of testing and remediation required at the Greenville facility had been shared with the former owners of the facility pursuant to the terms of an escrow agreement established at the time the facility was acquired. Subsequent to October 3, 1998, we released the former owners of the facility from liability related to the remediation of the Greenville facility after receiving a \$145,000 settlement payment. We estimate as of December 31, 2002 that the remaining investigative and remedial costs could total \$44,000 under the remediation plan we adopted, but these costs could increase if additional remediation is required.

On November 21, 2002, the Mississippi Commission on Environmental Quality approved a Brownfield agreement order with us. We believe that this program will provide for the most regulatory flexibility in reaching a site closure and will assist in eventual disposal of the facility. On December 11, 2002, we donated the property to Washington County, Mississippi to be used for economic development. We maintain the environmental liability as defined in the Brownfield agreement. We anticipate long-term monitoring of the site to continue until the concentration of contaminants reach the Mississippi department's target goals.

Altoona, Pennsylvania

We have entered our Altoona, Pennsylvania facility into the State of Pennsylvania Department of Environmental Protection Act II Program. The program addresses contamination issues related to closed hazardous waste lagoons and oil contamination of soil at this facility. The hazardous waste lagoons were closed in 1982 by the previous owner. The program is a voluntary site remediation program, which allows us to direct the site evaluation and any eventual remediation. Remaining costs to complete the investigation phase of the program are estimated to be \$58,000. Once the investigation phase is completed, a decision on remediation, if any, will be made. Based upon our preliminary report to the Pennsylvania Department of Environmental Protection no active remediation is anticipated at this site; however, some additional testing and modeling will be required. The additional testing and modeling are included in the estimated cost. It was our belief that the previous owner had indemnified us for any liability in the matter. In November 2002, we reached an out of court settlement concerning the indemnification with Millennium Chemicals, formerly National Distillers. As part of the agreement Millennium Chemicals has been released from all claims.

In 1998, we entered into a consent agreement with the municipality with regard to its wastewater discharge limits. We anticipate that we will be able to resolve the violation of the wastewater discharge limits through the use of wastewater discharge credits from the municipality. However, if this method is unsuccessful, we may have to install equipment that is estimated to cost approximately \$0.3 million.

Impact of Recently Issued Accounting Standards

See Note 1, Summary of Significant Accounting Policies-Recent Accounting Pronouncements, of the Notes to Consolidated Financial Statements.

ITEM 7A QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information required by this item is contained in "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations" and is incorporated herein by reference.

ITEM 8 FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Consolidated Statements of Operations—For the years ended December 31, 2002, 2001 and 2000.	F-1
Consolidated Balance Sheets—December 31, 2002 and 2001.	F-2
Consolidated Statements of Stockholders' Equity—For the years ended December 31, 2002, 2001 and 2000.	F-3
Consolidated Statements of Cash Flows—For the years ended December 31, 2002, 2001 and 2000.	F-4
Notes to Consolidated Financial Statements.	F-5
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ITEM 9 CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

No changes in or disagreements with accountants on accounting and financial disclosure matters existed during the most recent two years.

PART III

ITEM 10

DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this item with respect to directors is incorporated by reference from the information under the caption "Election of Directors" contained in our definitive proxy statement for the 2003 Annual Meeting of Stockholders. The required information concerning our executive officers is contained in Part I of this report. The required information concerning compliance with Section 16(a) of the Exchange Act is incorporated by reference from the information under the caption "Compliance With Section 16(a) of the Securities Exchange Act of 1934" contained in our definitive proxy statement for the 2003 Annual Meeting of Stockholders.

ITEM 11

EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from the information under the caption "Executive Compensation" in our definitive proxy statement for the 2003 Annual Meeting of Stockholders.

ITEM 12 SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated by reference from the information under the caption "Stock Ownership of Certain Beneficial Owners and Management" and "Executive Compensation-Equity Compensation Plan Information" in our definitive proxy statement for the 2003 Annual Meeting of Stockholders.

ITEM 13

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this item is incorporated by reference from the information contained under the caption "Certain Relationships and Related Transactions" in our definitive proxy statement for the 2003 Annual Meeting of Stockholders.

ITEM 14

CONTROLS AND PROCEDURES

- (a) Within the 90 days preceding the filing of this report on Form 10-K, we carried out an evaluation, under the supervision and with the participation of management, including the Chief Executive Officer, Dennis J. Horowitz, and the Chief Financial Officer, James E. Deason, of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14 under the Securities Exchange Act of 1934). Based upon that evaluation, Messrs. Horowitz and Deason have concluded that our disclosure controls and procedures are functioning effectively to provide reasonable assurance that we are meeting our disclosure obligations.
- (b) There have been no significant changes in our internal controls or in other factors that could significantly affect internal controls since the date of Messrs. Horowitz's and Deason's most recent review of our internal control systems. The design of any system of internal controls and procedures is based in part upon certain assumptions about the likelihood of future events. There can be no assurance that any design will succeed in achieving its stated goal under all potential future conditions, regardless of how remote.

PART IV

ITEM 15 EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

- (a) Index to exhibits, financial statements and schedules.
 - (1) The following consolidated financial statements for the Company and Report of Independent Auditors are included beginning on page F-1 hereof:

Consolidated Statements of Operations—For the years ended December 31, 2002, 2001, and 2000.

Consolidated Balance Sheets—December 31, 2002 and 2001.

Consolidated Statements of Stockholders' Equity—For the years ended December 31, 2002, 2001 and 2000.

Consolidated Statements of Cash Flows—For the years ended December 31, 2002, 2001 and 2000.

Notes to Consolidated Financial Statements.

Report of Ernst & Young LLP, Independent Auditors.

(2) The following consolidated financial statement schedule of the Company is included on page S-1 hereof:

SCHEDULE II Valuation and Qualifying Accounts

All other financial statements and schedules not listed have been omitted since the required information is included in the consolidated financial statements or the notes thereto, or is not applicable or required.

(3) Exhibits required by Item 601 of Regulation S-K:

The following exhibits are included in this Form 10-K:

10.20	2002 Change in Control, Severance and Non-Competition Agreement by and between Wolverine Tube, Inc. and Massoud Neshan dated as of July 12, 2002.
10.21	Amendment No. 2 to Credit Agreement dated as of March 25, 2003 by and among the Company, its U.S. and Canadian Subsidiaries and the lenders named therein.
10.22*	2003 Annual Performance Incentive Plan
21	List of Subsidiaries

23	Consent of Ernst & Young LLP, Independent Auditors
99.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

The following exhibits are incorporated by reference:

Exhibit No.	Description
3.1	Restated Certificate of Incorporation as amended through May 1, 1998 (incorporated by reference to Exhibit 3.1 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended July 4, 1998).
3.2	By-laws of the Company, as amended (incorporated by reference to Exhibit 3.2 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended September 27, 1997).
4.1	Rights Agreement, dated as of February 13, 1996, between the Company and Society National Bank, as Rights Agent (incorporated by reference to Exhibit 4.0 to Wolverine Tube, Inc.'s Registration Statement on Form 8-A, filed on February 22, 1996).
4.2	Indenture, dated as of August 4, 1998, between the Company and Wachovia Bank, NA (successor to First Union National Bank) as Trustee (incorporated by reference to Exhibit 4.1 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended July 4, 1998).
4.3	Indenture, dated as of March 27, 2002, between the Company, certain of the Company's subsidiaries and Wachovia Bank, NA (successor to First Union National Bank), as Trustee (incorporated by reference to Exhibit 4.3 to Wolverine Tube, Inc.'s Annual Report on Form 10-K for the period ended December 31, 2001).
10.1	Credit Agreement, dated as of March 27, 2002, among the Company, certain of the Company's subsidiaries, the lenders named therein, Wachovia Bank, N.A. as Administrative Agent and Congress Financial Corporation (Canada), as Canadian Agent (incorporated by reference to Exhibit 10.29 to

Wolverine Tube, Inc.'s Annual Report on Form 10-K for the period ended December 31, 2001).

- Amendment No. 1 to Credit Agreement dated as of September 27, 2002 by and among the Company, its U.S. and Canadian Subsidiaries and the lenders named therein (incorporated by reference to Exhibit 10.1 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended September 29, 2002).
- First Amendment to Pledge Agreement dated as of August 30, 2002 by and among the Company, its U.S. Subsidiaries, Wolverine Tube (Shanghai) Co., Ltd and Wachovia Bank, N.A. (incorporated by reference to Exhibit 10.2 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended September 29, 2002).
- Joinder Agreement dated as of September 27, 2002 by and among Wolverine Joining Technologies, LLC, Small Tube Manufacturing, LLC, Wolverine Finance, LLC, the Company and Wachovia Bank, N.A. (incorporated by reference to Exhibit 10.3 to Wolverine Tube, Inc's Quarterly Report on Form 10-Q for the period ended September 29, 2002).
- 10.5* The Company's 1991 Stock Option Plan (incorporated by reference to Exhibit 10.4 to Wolverine Tube, Inc.'s Registration Statement on Form S-1(File No. 33-65148)).
- 10.6* Form of Non-Qualified Stock Option Agreement under the Company's 1991 Stock Option Plan (incorporated by reference to Exhibit 10.5 to Wolverine Tube, Inc.'s Registration Statement on Form S-1(File No. 33-65148)).
- 10.7* The Company's 1993 Equity Incentive Plan (incorporated by reference to Exhibit 10.7 to Wolverine Tube, Inc.'s Registration Statement on Form S-1(File No. 33-65148)).
- The Company's 1993 Stock Option Plan for Outside Directors (incorporated by reference to Exhibit 10.8 to Wolverine Tube, Inc.'s Registration Statement on Form S-1(File No. 33-65148)).
- First Amendment to Amended and Restated 1993 Stock Option
 Plan for Outside Directors of Wolverine Tube, Inc.
 (incorporated by reference to Exhibit 10.1 to Wolverine Tube,
 Inc.'s Quarterly Report on Form 10-Q for the period ended
 April 1, 2001).

10.10* The Company's 2001 Stock Option Plan for Outside Directors (incorporated by reference to Appendix B to Wolverine Tube, Inc.'s Proxy Statement dated April 12, 2001). 10.11* Form of Non-Qualified Stock Option Agreement under the Company's 1993 Equity Incentive Plan (incorporated by reference to Exhibit 10.15 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended July 2, 1994). 10.12* Form of Indemnity Agreement (incorporated by reference to Exhibit 10.13 to Wolverine Tube, Inc.'s Annual Report on Form 10-K for the period ended December 31, 1994). 10.13* Long Term Incentive Plan (incorporated by reference to Exhibit 10.2 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended April 3, 1999). 10.14* Wolverine Tube, Inc. Supplemental Benefit Restoration Plan (Amended and Restated Effective as of January 1, 2002). (incorporated by reference to Exhibit 10.1 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2002). 10.15* Wolverine Tube, Inc. 2002 Supplemental Executive Retirement Plan (Effective as of January 1, 2002) (incorporated by reference to Exhibit 10.2 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2002). 10.16* 2002 Change in Control, Severance and Non-Competition Agreement by and between Wolverine Tube, Inc. and Dennis J. Horowitz dated as of July 12, 2002 (incorporated by reference to Exhibit 10.3 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2002). 10.17* 2002 Change in Control, Severance and Non-Competition Agreement by and between Wolverine Tube, Inc. and James E. Deason dated as of July 12, 2002 (incorporated by reference to Exhibit 10.4 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2002). 10.18* 2002 Change in Control, Severance and Non-Competition Agreement by and between Wolverine Tube, Inc. and Johann R. Manning, Jr. dated as of July 12, 2002 (incorporated by reference to Exhibit 10.5 to Wolverine Tube, Inc's Quarterly Report on Form 10-Q for the period ended June 30, 2002). 10.19* 2002 Change in Control, Severance and Non-Competition Agreement by and between Wolverine Tube, Inc. and Keith Weil dated as of July 12, 2002 (incorporated by reference to

Exhibit 10.6 to Wolverine Tube, Inc.'s Quarterly Report on Form 10-Q for the period ended June 30, 2002).

18.1

Letter dated March 11, 2002 from Ernst & Young LLP regarding preference of a change in method of accounting for inventories. (incorporated by reference to Exhibit 18.1 to Wolverine Tube, Inc.'s Annual Report on Form 10-K for the period ended December 31, 2001).

* Identifies each exhibit that is a "management contract or compensatory plan or arrangement" required to be included as an exhibit to this Form 10-K pursuant to Item 14(c) of Form 10-K.

(b) Reports on Form 8-K.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Huntsville, State of Alabama, on the 26th day of March 2003.

WOLVERINE TUBE, INC.

By: <u>/s/ James E. Deason</u>
Name: James E. Deason

Title: Executive Vice President,

Chief Financial Officer, Secretary and Director

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
By: /s/ Dennis J. Horowitz Dennis J. Horowitz	Chairman, President, Chief Executive Officer and Director (Principal Executive Officer)	March 26, 2003
By: /s/ James E. Deason James E. Deason	Executive Vice President, Chief Financial Officer, Secretary and Director (Principal Financial Officer and Principal Accounting Officer)	March 26, 2003
By: <u>/s/ Jan K. Ver Hagen</u> Jan K. Ver Hagen	Director	March 28, 2003
By: /s/ W. Barnes Hauptfuhrer W. Barnes Hauptfuhrer	Director	March 25, 2003
By: <u>/s/ Thomas P. Evans</u> Thomas P. Evans	Director	March 25, 2003
By: /s/ John L. Duncan John L. Duncan	Director	March 26, 2003
By: /s/ Chris A. Davis Chris A. Davis	Director	March 28, 2003
By: /s/ Gail O. Neuman Gail O. Neuman	Director	March 25, 2003

Chief Executive Officer Certification

I, Dennis J. Horowitz, certify that:

- 1. I have reviewed this annual report on Form 10-K of Wolverine Tube, Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing equivalent functions):
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 26, 2003

/s/ Dennis J. Horowitz

Dennis J. Horowitz

Chairman, President, Chief Executive Officer and Director

Chief Financial Officer Certification

I, James E. Deason, certify that:

- 1. I have reviewed this annual report on Form 10-K of Wolverine Tube, Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing equivalent functions):
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 26, 2003

/s/ James E. Deason

James E. Deason

Executive Vice President, Chief Financial Officer, Secretary and Director

Wolverine Tube, Inc. and Subsidiaries Consolidated Statements of Operations

	Year	ended December 3	1,
	2002	2001	2000
(In thousands except per share amounts)			
Net sales	\$550,523	\$583,114	\$621,464
Cost of goods sold	492,082	520,874	536,351
Gross profit	58,441	62,240	85,113
Selling, general and administrative expenses	30,616	32,254	31,961
Restructuring and other charges		1,546	-
Operating income from continuing operations	27,825	28,440	53,152
Other (income) expenses:			
Interest expense, net	19,681	13,100	12,168
Gain on extinguishment of debt	(1,349)	-	-
Amortization and other, net	1,008	(447)	417
Income from continuing operations before income taxes	8,485	15,787	40,567
Income tax provision	1,315	4,345	14,660
Income from continuing operations	7,170	11,442	25,907
Income (loss) from discontinued operations, net of income			
tax provision (benefit) of (\$0.9) million, (\$12.1)			
million and \$0.5 million for 2002, 2001, 2000,			
respectively	(1,610)	(31,240)	782
Net income (loss)	5,560	(19,798)	26,689
Less preferred stock dividends	(58)	(280)	(280)
Net income (loss) applicable to common shares	\$5,502	(\$20,078)	\$26,409
Earnings per common share—basic:			
Income from continuing operations	\$0.58	\$0.92	\$2.11
Income (loss) from discontinued operations	(0.13)	(2.58)	0.06
Net income (loss) per common share—basic	\$0.45	(\$1.66)	\$2.17
Basic weighted average number of common shares	12,231	12,077	12,153
Earnings per common share—diluted:			
Income from continuing operations	\$0.58	\$0.91	\$2.08
Income (loss) from discontinued operations	(0.13)	(2.54)	0.06
Net income (loss) per common share—diluted	\$0.45	(\$1.63)	\$2.14
Diluted weighted average number of common and			

See accompanying notes.

Wolverine Tube, Inc. and Subsidiaries Consolidated Balance Sheets

	December 31,	
	2002	2001
(In thousands except share and per share amounts)		
Assets		
Current assets		
Cash and equivalents	\$53,920	\$22,739
Accounts receivable, net	65,212	67,164
Inventories	85,485	103,360
Refundable income taxes	6,347	2,410
Prepaid expenses and other	8,055	7,230
Total current assets	219,019	202,903
Property, plant and equipment, net	208,999	218,476
Deferred charges, net	13,811	3,125
Goodwill, net	100,100	99,870
Assets held for sale	8,791	9,072
Prepaid pensions	<u> </u>	5,981
Total assets	\$550,720	\$539,427
Liabilities, Redeemable Preferred Stock and Stockholders' Equity Current liabilities		
Accounts payable	\$30,290	\$34,137
Accrued liabilities	19,293	25,689
Short-term borrowings	1,217	1,684
Total current liabilities	50,800	61,510
Deferred income taxes	11,902	9,225
Long-term debt	255,712	247,698
Pension liabilities	14,540	, -
Postretirement benefit obligation	15,666	15,720
Accrued environmental remediation	1,465	1,862
Fotal liabilities	350,085	336,015
Redeemable cumulative preferred stock, par value \$1 per share; 500,000 shares authorized; 20,000 shares issued and outstanding at December 31, 2001	-	2,000
Stockholders' equity Common stock, par value \$0.01 per share; 40,000,000 shares authorized, 14,326,239 and 14,276,831 shares issued as of		
December 31, 2002 and 2001, respectively	143	143
Additional paid-in capital	103,213	103,759
Retained earnings	164,547	159,045
Unearned compensation	(302)	(165)
Accumulated other comprehensive loss	(29,591)	(21,898)
Treasury stock, at cost (2,063,800 shares and 2,179,900 shares as		
of December 31, 2002 and 2001, respectively)	(37,375)	(39,472)
Total stockholders' equity	200,635	201,412
Total liabilities, redeemable preferred stock and stockholders' equity	\$550,720	\$539,427

Wolverine Tube, Inc. and Subsidiaries Consolidated Statements of Redeemable Preferred Stock and Stockholders' Equity

	Redeer Preferre		Common	Stock	Additional Paid-In	Retained	Unearned Compen-	lated Other Compre- hensive Income	Treasury	Total Stock- holders'
	Shares	Amount	Shares	Amount	Capital	Earnings	sation	(Loss)	Stock	Equity
(In thousands except number of s	hares)						·			
Balance at December 31, 1999	20,000	\$2,000	14,196,289	\$142	\$102,654	\$152,714	\$(309)	\$(10,688)	(\$32,014)	\$212,499
Comprehensive income:										
Net income	-	-	-	-	-	26,689	-	=	-	26,689
Translation adjustments	-	-	-	-	-	-	-	(3,632)		(3,632)
Comprehensive income									-	23,057
Common stock issued Tax benefit from stock options exercised	-	-	18,029	-	58 3	-	-	-	-	58 3
Preferred stock dividends Issuance of restricted stock award and amortization of unearned compensation	-	-	-	-	- 874	(280)	(304)	- · · · · · · · · · · · · · · · · · · ·	-	(280) 570
Purchase of treasury stock	-	-	-	-	-	_	-	-	(7,458)	(7,458)
Balance at December 31, 2000	20,000	2,000	14,214,318	142	103,589	179,123	(613)	(14,320)	(39,472)	228,449
Comprehensive loss:	,		•			,	` ,	, ,	, , ,	ŕ
Net loss	-	-	-	-	-	(19,798)	_	_	_	(19,798)
Translation adjustments Change in fair value of derivatives, net of tax benefit of \$1,021	-	-	-	-	-	-	-	(5,681)	-	(5,681)
Comprehensive loss									-	(27,376)
Common stock issued Tax benefit from stock options exercised	-	-	62,513	1	70 78	-	-	-	-	7 <u>1</u> 78
Preferred stock dividends	-	-	-	-	76	(280)	•	-	-	(280)
Issuance of restricted stock award and amortization of unearned compensation	-	-		_	22	(280)	448	_	_	470
Balance at December 31, 2001	20,000	2,000	14,276,831	143	103,759	159,045	(165)	(21,898)	(39,472)	201,412
Comprehensive income:	20,000	2,000	14,270,031	143	105,759	139,043	(103)	(21,090)	(39,472)	201,412
Net income	_	_	_		_	5,560	_	_	_	5,560
Translation adjustments Change in fair value of derivatives, net of tax	-	-	-	-	-	-	-	2,201	-	2,201
of \$884 Minimum pension liability, net of tax benefit of	-	-	-	-	-	-	-	1,641	-	1,641
\$7,166	-	-	-	-	-	-	-	(11,535)		(11,535)
Comprehensive loss									_	(2,133)
Common stock issued Tax benefit from stock	-	•	49,408	-	89	-	~	~	-	89
options exercised Redemption of preferred stock	(20,000)	(2,000)	-	-	(1,097)	-	-	-	2,097	1,000
Preferred stock dividends Issuance of restricted stock award and amortization of unearned compensation	-	-	-	-	423	(58)	(137)	•	•	(58) 286
Balance at December 31, 2002	<u>-</u>	<u> </u>	14,326,239	£1.42		\$164.547		(\$20.501)	(837 275)	
Datance at December 31, 2002		- 3 -	14,320,239	\$143	\$103,213	\$164,547	(\$302)	(\$29,591)	(\$37,375)	\$200,635

Wolverine Tube, Inc. and Subsidiaries Consolidated Statements of Cash Flows

	Year ended December		er 31,	
	2002	2001	2000	
(In thousands)				
Operating Activities				
Income from continuing operations	\$7,170	\$11,442	\$25,907	
Adjustments to reconcile income from continuing				
operations to net cash provided by operating				
activities:				
Depreciation	17,060	15,022	14,109	
Amortization	1,356	3,657	2,931	
Deferred income taxes	(937)	(1,635)	5,353	
Non-cash portion of restructuring and other charges	-	1,531	-	
Gain on retirement of senior notes	(1,349)		-	
Other non-cash items	627	140	570	
Changes in operating assets and liabilities:				
Accounts receivable, net	797	15,873	(6,072)	
Inventories	10,564	(9,956)	(11,453)	
Refundable income taxes	(15)	8,530	(1,415)	
Prepaid expenses and other	(2,078)	(368)	1,155	
Accounts payable	(702)	(16,291)	15,750	
Accrued liabilities, including pension,				
postretirement benefit and environmental	8,943	(1,298)	(193)	
Net cash provided by operating activities	41,436	26,647	46,642	
Investing Activities				
Additions to property, plant and equipment	(7,747)	(27,612)	(31,676)	
Acquisition of business assets	-	-	(43,948)	
Other		(1,601)	16	
Net cash used for investing activities	(7,747)	(29,213)	(75,608)	
Financing Activities				
Net decrease in note payable	-	(320)	-	
Financing fees and expenses paid	(8,687)	-	-	
Net borrowing (repayment) from revolving credit facilities	(98,372)	16,724	48,671	
Proceeds from issuance of senior notes	118,546	-	-	
Retirement of senior notes	(13,901)	-	-	
Principal borrowing (repayment) on long-term debt	2,021	-	(338)	
Issuance of common stock	89	130	58	
Redemption of preferred stock	(1,000)	-		
Purchase of treasury stock	-	-	(7,458)	
Dividends paid on preferred stock	(58)	(280)	(280)	
Net cash provided by (used for) financing activities	(1,362)	16,254	40,653	
Effect of exchange rate on cash and equivalents	<u>874</u>	(1,139)	(709)	
Net cash provided by continuing operations	33,201	12,549	10,978	
Net cash used for discontinued operations	(2,020)	(13,268)	(14,414)	
Net increase (decrease) in cash and equivalents	31,181	(719)	(3,436)	
Cash and equivalents at beginning of year	22,739	23,458	26,894	
Cash and equivalents at end of year	\$53,920	\$22,739	\$23,458	
Supplemental disclosure of cash flow:				
Interest paid	\$19,074	\$15,500	\$15,163	
Income taxes paid (refunded)	(\$7,359)	(\$2,331)	\$10,767	
See accompanying notes.				

Wolverine Tube, Inc. and Subsidiaries Notes to Consolidated Financial Statements

1. Summary of Significant Accounting Policies

Organization and Business

The accompanying consolidated financial statements include the accounts of Wolverine Tube, Inc. (the "Company") and its majority-owned subsidiaries after elimination of significant intercompany accounts and transactions. References to the "Company", "we" or "us" refer to Wolverine Tube, Inc. and its consolidated subsidiaries, unless the context otherwise requires.

We are engaged in the manufacturing and distribution of copper and copper alloy tubular products, fabricated and metal joining products, as well as rod and bar products. Our focus is developing and manufacturing high value added products used in engineered applications that require tubular products having superior heat transfer capability. Our major customers are primarily located in North America and include commercial and residential air conditioning and refrigeration equipment manufacturers, appliance manufacturers, automotive manufacturers, industrial equipment manufacturers, utilities and other power generating companies, refining and chemical processing companies and plumbing wholesalers.

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States requires our management to make certain estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Revenue Recognition Policy

Revenues are recognized when title to our finished products transfers to an unaffiliated customer and the risks and rewards of ownership are transferred pursuant to shipping terms. Sales are made under normal terms and generally do not require collateral. Appropriate provision is made for uncollectible accounts.

Cash and Equivalents

We consider all highly liquid financial instruments with maturity of three months or less at the time of purchase to be cash equivalents.

Inventories

Our raw materials, work-in-process and finished products inventories are carried at the lower of FIFO cost or market. We determine market value based upon assumptions about future demand and market conditions. The remaining inventories, which primarily include maintenance and operating supplies, are valued using various methods across our facilities. We write down our inventories for estimated obsolescence and unmarketable inventory equal to the difference between the cost of inventory and the estimated market value.

Property, Plant and Equipment

Property, plant and equipment are stated at cost. Depreciation is provided using the straight-line method over the following periods:

Furniture and fixtures	2-9 years
Software	3-5 years
Tooling	3-10 years
Building and improvements	3 - 39 years
Machinery and equipment	5-30 years

Impairment of Long-Lived Assets

We recognize impairment losses on long-lived assets under the provisions of Financial Accounting Standards Board (FASB) Statement of Financial Accounting Standards (SFAS) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. When facts and circumstances indicate that long-lived assets used in operations may be impaired and the undiscounted cash flows estimated to be generated from those assets are less than their carrying values, we record an impairment loss equal to the excess of the carrying value over fair value. Long-lived assets held for disposal are valued at the lower of the carrying amount or estimated fair value less cost to sell.

Income Taxes

Deferred income taxes are provided for the temporary differences between the financial reporting basis and the tax basis of our assets and liabilities. Property, plant and equipment, inventories, prepaid pension, postretirement benefit obligations, and certain other accrued liabilities are the primary sources of these temporary differences. Deferred income tax also includes operating loss and tax credit carryforwards.

Deferred Charges

Debt issuance costs are deferred and amortized over the terms of the debt to which they relate using the interest method. At December 31, 2002, we had \$10.6 million of debt issuance costs, net of \$1.7 million of accumulated amortization.

Goodwill

In June 2001, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 142, *Goodwill and Other Intangible Assets*. This statement addresses financial accounting and reporting for acquired goodwill and other intangible assets. SFAS No. 142 eliminates amortization of goodwill and requires an impairment-only model for recording the value of goodwill. SFAS No. 142 presumes that goodwill has an indefinite useful life and thus should not be amortized, but rather tested at least annually for impairment using a lower of cost or fair value approach.

On January 1, 2002, we adopted SFAS No. 142. Accordingly, we ceased amortizing all previously recorded goodwill as of that date. A transitional impairment test of all goodwill was required within six months of adopting SFAS No. 142. We completed the transitional impairment test of goodwill (as of January 1, 2002) required by the new rules during the second

quarter of 2002. Based on the results of these tests, the fair value of the tested business units exceeded the carrying value of those business units and thus no transitional impairment charge was recorded. During the fourth quarter of 2002, we conducted the required annual goodwill impairment review. Updated valuations were computed using a discounted cash flow approach based on forward-looking information regarding market share, revenues and costs for each business unit. Our valuation was based on a 4% to 5% long-term growth rate, a discount rate of 12% and two reporting units, The Tube Group and The Non-Tube Group. The Tube Group consists of our Decatur, Shawnee, Jackson, Booneville, Montreal, London, Shanghai and Esposende facilities for which we have \$23.2 million of goodwill. The Non-Tube Group consists of our Altoona, Carrollton, Warwick, Ardmore and Apeldoorn facilities for which we have \$76.9 million of goodwill. Based on the results of this review, the fair value of the tested business units exceeded the carrying value of those business units and thus no impairment charge was recorded. If we are unable to achieve our estimated growth rates and profit projections, if interest rates increase or if our other estimates or their related assumptions change in the future, we may be required to record impairment charges for these assets in the future.

At December 31, 2002, we had \$100.1 million of goodwill, net of \$18.6 million of accumulated amortization. The increase in goodwill during 2002 results from the translation of the goodwill of our distribution center in The Netherlands whose functional currency is the Euro.

Income from continuing operations for 2001 and 2000, adjusted to exclude amortization expense recognized related to goodwill would have been \$14.1 million, or \$1.13 per diluted share and \$28.2 million or \$2.27 per diluted share, respectively. Including the loss from discontinued operations, the net loss for 2001 adjusted to exclude amortization expense related to goodwill would have been \$(16.9) million, or \$(1.39) per diluted share. Net income for 2000 adjusted to exclude amortization expense related to goodwill would have been \$29.2 million, or \$2.34 per diluted share.

Earnings Per Common Share

Basic income from continuing operations and basic net income per share is based on the weighted average number of common shares outstanding and income reduced by preferred dividends. Diluted income from continuing operations and diluted net income per share is based on the weighted average number of common shares outstanding plus the effect of dilutive stock options and income reduced by preferred dividends.

Derivatives and Hedging Activities

We utilize derivative financial instruments to manage risk exposure to movements in interest, commodity and foreign exchange rates. We do not hold or issue derivative financial instruments for trading or speculative purposes. In June 1998, the FASB issued SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, which was amended in June 2000 by SFAS Nos. 137 and 138. SFAS No. 133, as amended, establishes accounting and reporting standards for derivative instruments and hedging activities. Initially, upon adoption of the new derivative accounting requirements, and prospectively, on the date we enter into a derivative contract, we designate derivatives as either a hedge of a recognized asset or liability or an unrecognized firm commitment (fair value hedge) or a hedge of a forecasted transaction (cash flow hedge). For fair value hedges, both the effective and ineffective portion of the changes in the fair value of the

derivative, along with the gain or loss on the hedged item that is attributable to the hedged risk, are recorded in earnings. The effective portion of changes in fair value of a derivative that is designated as a cash flow hedge is recorded in accumulated other comprehensive income or loss. When the hedged item is realized, the gain or loss included in accumulated other comprehensive income or loss is relieved. Any ineffective portion of the changes in the fair values of derivatives used as cash flow hedges are reported in the consolidated statements of operations. We document hedge relationships, including identification of the hedging instruments and the hedged item, as well as our risk management objectives and strategies for undertaking the hedge transactions at the inception of each hedge transaction. Derivatives are recorded in the consolidated balance sheet at fair value. We formally assess, at inception and at least quarterly thereafter, whether the derivatives that are used in hedging transactions are highly effective in offsetting change in either the fair values or cash flows of the hedged item.

Fair Values of Financial Instruments

We use the following methods in estimating fair value disclosures for financial instruments:

Cash and equivalents, accounts receivable and accounts payable: The carrying amount reported in the consolidated balance sheets for these assets approximates their fair value.

Revolving credit facility, long-term debt and redeemable cumulative preferred stock: The carrying amount of our borrowings under our revolving credit facilities approximates fair value. The fair value of our 7.375% Senior Notes and our 10.5% Senior Notes and any derivative financial instruments are based upon quoted market prices. The fair value of our redeemable cumulative preferred stock is based upon its dividend rate and call provisions.

Derivatives: The fair value of our interest rate, foreign currency and commodity derivative instruments are determined by reference to quoted market prices.

The following table summarizes fair value information for our financial instruments:

4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	2002	2002	2001	2001
Assets (liabilities)	Carrying value	Fair value	Carrying value	Fair value
(In thousands)				
Revolving credit facilities	\$ -	\$ -	(\$97,906)	(\$97,906)
Senior notes	(253,317)	(246,200)	(149,792)	(127,500)
Other debt	(3,239)	(3,239)	(1,684)	(1,684)
Redeemable cumulative preferred stock	-	-	(2,000)	(2,019)
Interest rate swap	373	373	-	-
Foreign currency exchange contracts	(80)	(80)	(9)	(9)
Commodity futures contracts	416	416	(2,918)	(2,918)

Environmental Expenditures

Environmental expenditures that pertain to our current operations and relate to future revenues are expensed or capitalized consistent with our capitalization policy. Expenditures that result from the remediation of an existing condition caused by past operations, that do not contribute to future revenues, are expensed. Liabilities, which are undiscounted, are recognized for remedial activities when the cleanup is probable and the cost can be reasonably estimated.

Stock Options

At December 31, 2002, we had stock-based employee and outside director compensation plans, which are described more fully in Note 18. We account for these plans under the recognition and measurement principles of APB Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations. No stock-based employee or outside director compensation cost is reflected in net income, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant.

Net income and earnings per share as if we had applied the fair value recognition provisions of FASB Statement No. 123, *Accounting for Stock-Based Compensation*, to stock-based employee and outside director compensation are as follows:

	2002	2001	2000
(In thousands, except per share amounts)			
Net income applicable to common shares, as reported Deduct: Total stock-based employee compensation expense determined under fair value based method for all	\$5,502	(\$20,078)	\$26,409
awards, net of related tax effects	(2,246)	(2,833)	(3,228)
Pro forma net income applicable to common shares	\$3,256	(\$22,911)	\$23,181
Earnings per share:			
Basic – as reported	\$0.45	(\$1.66)	\$2.17
Basic – pro forma	\$0.27	(\$1.90)	\$1.91
Diluted – as reported	\$0.45	(\$1.63)	\$2.14
Diluted – pro forma	\$0.27	(\$1.89)	\$1.91

Translation to U.S. Dollars

Our assets and liabilities denominated in foreign currency are translated to U.S. dollars at rates of exchange at the balance sheet date. Income statement items are translated at average exchange rates during the period. Translation adjustments arising from changes in exchange rates are included in the accumulated other comprehensive loss component of stockholders' equity. Realized exchange gains and losses are included in "Amortization and other, net" in the consolidated statements of operations. Exchange (gains) losses netted to zero in 2002, (\$0.5) million in 2001 and (\$0.1) million in 2000.

Research and Development Costs

Expenditures relating to the development of new products and processes, including significant improvements and refinements to existing products, are expensed as incurred. The amounts charged to expense were \$3.1 million in 2002, \$3.7 million in 2001 and \$3.7 million in 2000.

Recent Accounting Pronouncements

In June 2002, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standard (SFAS) No. 146, Accounting for Costs Associated with Exit or Disposal Activities. SFAS No. 146 nullifies Emerging Issues Task Force (EITF) Issue No. 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring) and requires that a liability for a cost associated with an exit or disposal activity be recognized and measured initially at fair value in the period in which the liability is incurred. Under EITF No. 94-3, a liability for an exit cost was recognized at the date of an entity's commitment to an exit plan. The adoption of SFAS No. 146 is expected to result in delayed recognition for certain types of costs as compared to the provisions of EITF 94-3. SFAS No. 146 is effective for new exit or disposal activities that are initiated after December 31, 2002, and does not affect amounts currently reported in our consolidated financial statements. SFAS No. 146 will affect the types and timing of costs included in future restructuring programs, if any, but is not expected to have a material impact on our financial position or results of operations.

In April 2002, the FASB issued SFAS No. 145, Rescission of FASB Statements No. 4, 44 and No. 64, Amendment of FASB Statement No. 13, and Technical Corrections, which updates, clarifies and simplifies existing accounting pronouncements. SFAS No. 4, which required all gains and losses from the extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, net of related tax effect, was rescinded. The FASB encouraged early adoption of the provisions of SFAS No. 145 related to the rescission of SFAS No. 4 and thus we adopted these provisions in the third quarter of 2002 and for the year 2002 are reporting a \$1.3 million gain on extinguishment of debt as a separate line item in income from continuing operations.

2. Discontinued Operations

In December 2001, the Executive Committee of the Board of Directors authorized management to discontinue the operations of Wolverine Ratcliffs, Inc. ("WRI"), which was a 74.5% owned strip business that was jointly formed in 1999 with Ratcliffs-Severn, Ltd. In 2002, we acquired the remaining 25.5% interest in WRI and merged WRI into Wolverine Tube (Canada), Inc. to facilitate the liquidation of the business. WRI, which was previously included in the rod, bar, and other reportable segment, produced both heavy-gauge and light-gauge copper and copper alloy strip used primarily by automotive, hardware and electrical equipment manufacturers. Our decision to discontinue the WRI operations was due to adverse changes in market conditions that made it unlikely for us to produce an acceptable return on investment that would enhance shareholder value. We engaged a financial advisor to pursue opportunities to dispose of the business but we were not able to dispose of the business as a going concern and subsequently commenced liquidation of the business during 2002. As of December 31, 2002, substantially all

of the inventory and net receivables were liquidated as well as some of the equipment. We are continuing to pursue opportunities to dispose of the remainder of the equipment and the building.

Accordingly, as required by Accounting Principles Board Opinion, ("APB") 30, Reporting the Results of Operations, Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions, the operating results of WRI for all periods presented herein are reported in discontinued operations in the consolidated financial statements. In addition, in the fourth guarter of 2001 we recorded a \$31.5 million (\$23.9 million after tax) estimated loss on the disposal of the WRI operations, which included a \$2.5 million (\$1.6 million after tax) provision for estimated losses during the expected phase-out period. The expected loss on disposal of the WRI operations and the expected operating losses during the phase-out period were based on our best estimates of the most likely outcome, considering, among other things, our knowledge of valuations of strip production assets. In the fourth quarter of 2002, we recorded a \$2.5 million (\$1.6 million after tax) loss from discontinued operations for remaining estimated closing costs in excess of the provision for losses recorded in the fourth quarter of 2001. We have realized approximately \$10 million of pretax proceeds from the realization or sale of the assets of the business, net of our cash payments to settle the liabilities of the discontinued operations during the twelve months ended December 31, 2002, the majority of which is recorded in continuing operations in that certain accounts receivable and inventories were transferred to continuing operations. As is reflected on the Consolidated Statements of Cash Flows, discontinued operations used \$2.0 million of cash, consisting of a \$1.5 million net use of cash from operations and the sale of assets and \$0.5 million of additions to property, plant and equipment.

Operating results of the discontinued WRI operations for 2002, which were charged to previously established reserves, 2001 and 2000 are as follows:

	2002	2001	2000
(In thousands)			
Net sales	\$12,063	\$48,886	\$79,875
Income (loss) before income tax benefit	\$(3,209)	\$(11,882)	\$1,289
Income tax provision (benefit)	(851)	(4,507)	507
Net income (loss)	\$(2,358)	\$(7,375)	\$782

Assets and liabilities of the discontinued WRI operations have been reflected in the consolidated balance sheets as current or non-current based on the original classification of these accounts, net of any necessary valuation allowances, except that property, plant and equipment of the WRI operations to be disposed in the amount of \$3.4 million, net of a necessary valuation allowance, have been included in "assets held for sale". The accrual at December 31, 2002 for the estimated losses to be incurred of \$2.5 million (pre-tax) is presented in "accrued liabilities" in the consolidated balance sheets.

Net assets (liabilities) of the discontinued WRI operations are as follows:

	December 31, 2002	December 31, 2001
(In thousands)		
Cash and equivalents	\$44	\$2,165
Other current assets	880	11,996
Assets held for sale	3,363	3,691
Deferred income taxes	-	11,935
Other assets	122	192
Current liabilities	(5,218)	(12,626)
Other liabilities	-	(75)
Net assets (liabilities) of discontinued operations	\$(809)	\$17,278

We do not believe that there are any material contingent liabilities related to discontinued operations, such as product or environmental liabilities or litigation, that are expected to remain with us after the disposal of the WRI operations.

3. Inventories

Inventories are as follows at December 31:

	2002	2001
(In thousands)		
Finished products	\$25,750	\$22,565
Work-in-process	16,027	20,850
Raw materials and supplies	43,708	59,945
Totals	\$85,485	\$103,360

4. Prepaid Expenses and Other

Prepaid expenses and other are as follows at December 31:

	2002	2001
(In thousands)		
Prepaid expenses	\$4,556	\$3,195
Deferred tax assets	2,886	2,932
Other assets recording the fair value of hedging instruments	613	1,103
Totals	\$8,055	\$7,230

5. Derivatives

We adopted Statement of Financial Accounting Standard (SFAS) No. 133 (subsequently amended by SFAS Nos. 137 and 138), *Accounting for Derivative Instruments and Hedging Activities*, on January 1, 2001. The adoption of SFAS No. 133 resulted in an insignificant impact

on reported earnings and accumulated other comprehensive loss. At December 31, 2002 and 2001, we reported an unrealized loss of \$0.4 million (\$0.3 million, net of tax) and \$2.9 million (\$1.9 million, net of tax), respectively, in accumulated other comprehensive loss for our outstanding commodity hedge contracts.

We have entered into commodity forward contracts through March 2004 to hedge against the risk of copper price increases with respect to firm price sales commitments. The notional amount of these forward contracts, which were designated as fair value hedging instruments, was \$12.4 million at December 31, 2002. In comparison, at December 31, 2001, we had entered into commodity forward contracts through December 31, 2003 that were designated as fair value hedging instruments and had a notional amount of \$17.3 million. For the twelve months ended December 31, 2002 and 2001, an insignificant impact to cost of goods sold was recorded for the ineffective portion of these derivative instruments.

Also, we have entered into commodity forward contracts through December 31, 2003 to reduce our risk of future copper price increases on anticipated sales. The notional amount of these forward contracts, which were designated as cash flow hedging instruments, was \$20.9 million at December 31, 2002. At December 31, 2002, we recorded the fair value of these forward contracts of \$0.5 million (\$0.3 million, net of tax) in accrued liabilities and in accumulated other comprehensive loss. We expect that \$0.5 million (\$0.3 million, net of tax) of the unrealized loss on our outstanding forward contracts will be reclassified to earnings during the next twelve months when the anticipated transactions occur. In comparison, at December 31, 2001, we had entered into commodity forward contracts through December 31, 2003 that were designated as cash flow hedging instruments and had a notional amount of \$28.8 million. At December 31, 2001, we recorded the fair value of these forward contracts of \$2.7 million (\$1.7 million, net of tax) in accrued liabilities and in accumulated other comprehensive loss. For the twelve months ended December 31, 2002 and 2001, an insignificant impact to cost of goods sold was recorded for the ineffective portion of these derivative instruments.

Additionally, we have entered into commodity forward contracts to sell copper in March 2003 with a notional value of \$24.4 million and in December 2003 with a notional value of \$10.6 million. We entered these forward contracts in order to mitigate the impact of fluctuating copper prices with regard to the valuation of our inventory balances. These forward contracts were not designated as effective hedges and therefore they are marked to market each month and the gains and losses are recorded in cost of goods sold. At December 31, 2002, we recorded the fair value of these forward contracts of \$0.8 million (\$0.5 million, net of tax) as a reduction to accrued expense and cost of sales.

At December 31, 2002, we had commodity futures to purchase natural gas for the period of February 2003 through March 2003 with a notional value of \$0.5 million. These futures contracts were designated as cash flow hedging instruments and there was no ineffective portion of the change in fair value of these future contracts for the period ended December 31, 2002. At December 31, 2002, we recorded the fair value of these instruments of \$0.1 million (\$0.1 million, net of tax) in other assets and as accumulated other comprehensive income. In comparison, at December 31, 2001, we had commodity futures to purchase natural gas for the period of February 2002 through October 2002 that were designated as cash flow hedging instruments and had a notional value of \$1.4 million. At December 31, 2001, we recorded the

fair value of these instruments of \$0.2 million (\$0.2 million, net of tax) in accrued liabilities and accumulated other comprehensive loss and there was no ineffective portion of the change in fair value of these futures contracts.

At December 31, 2002, we had forward exchange contracts outstanding to purchase foreign currency with a notional value of \$1.1 million and to sell foreign currency with a notional value of \$1.2 million. At December 31, 2001, we had forward exchange contracts outstanding to purchase foreign currency with a notional value of \$1.4 million and to sell foreign currency with a notional value of \$1.0 million. These forward contracts and the underlying hedged receivables and payables are carried at their fair values with any associated gains and losses recognized in current period earnings. The impact on reported earnings of recording the fair value of these hedging instruments and the underlying hedged receivables and payables for the period ended December 31, 2002 and December 31, 2001 was not significant.

In October 2002, we completed an interest rate swap on \$50.0 million notional amount of our 7.375% Senior Notes. The terms of the interest rate swap are a semi-annual payment date of February 1 and August 1, a floating rate option of the six-month LIBOR rate plus a spread of 3.76% and a termination date of August 1, 2008. The interest rate swap is accounted for in accordance with SFAS No. 133 (subsequently amended by SFAS No. 137 and 138) Accounting For Derivative Instruments and Hedging Activities as a fair value hedge and because the terms of the debt and the payments to be received on the swap coincide, the hedge is considered perfectly effective against the changes in the fair value of the debt over its term. The swap agreement was executed in order to (i) convert a portion of the Senior Notes fixed-rate debt into floating-rate debt; (ii) maintain a capital structure containing appropriate amounts of fixed and floating-rate debt; and (iii) reduce net interest payments and expense in the near-term. As of December 31, 2002, we recorded the fair market value of the interest rate swap of \$0.4 million as other assets with a corresponding increase to the hedged debt, with equal and offsetting unrealized gains and losses included in other income (expense), net. Interest payments are recognized through interest expense and are made and received on the first day of each February and August, commencing February 1, 2003 and ending on the maturity date. Since the interest rate is not known until the end of each semi-annual interest period, estimates are used during such period based upon published forward-looking LIBOR rates. Any differences between the estimated interest expense and the actual interest payment are recorded to interest expense at the end of each semiannual interest period. The interest rate swap resulted in a reduction of interest expense in 2002 of \$0.3 million.

6. Assets Held for Sale

Assets held for sale at December 31, 2002 and 2001 include the net assets of our unoccupied Roxboro, North Carolina facility and the discontinued operations of WRI, both of which have been written down to their estimated fair value less cost to sell (\$8.8 million) based on our knowledge of the valuations of these assets and in light of their appraised value. The net assets of our unoccupied Greenville, Mississippi facility were fully reserved at December 31, 2001 and in December 2002 we donated these assets to Washington County, Mississippi. Although we believe we have appropriately reduced the carrying values of all assets held for sale to their estimated recoverable amounts, net of disposal costs where appropriate, actual results could be

different and our result of operations in future periods could reflect gains or losses on these assets.

7. Property, Plant and Equipment

Property, plant and equipment are as follows at December 31:

	2002	2001
(In thousands)		
Land and improvements	\$11,573	\$11,537
Building and improvements	49,096	48,820
Machinery and equipment	276,200	268,587
Construction-in-progress	3,207	6,430
	340,076	335,374
Less accumulated depreciation	(131,077)	(116,898)
Totals	\$208,999	\$218,476

8. Deferred Charges

Deferred charges are as follows at December 31:

	2002	2001
(In thousands)		
Deferred debt issuance cost	\$10,616	\$2,130
Patents and other	3,800	3,685
Unrecognized prior service cost for pensions	3,250	-
	17,666	5,815
Less accumulated amortization	(3,855)	(2,690)
Totals	\$13,811	\$3,125

Deferred charges other than unrecognized prior service cost for pensions are subject to amortization. Deferred debt issuance cost increased in 2002 due to the issuance of \$120 million in principal amount of 10.5% Senior Notes. Net deferred debt issuance cost of \$8.9 million will be amortized over a weighted average of 6.2 years resulting in \$1.4 million of amortization expense in each of the five succeeding years beginning in 2003. In 2002, 2001 and 2000, we recorded \$1.4 million, \$0.6 million and \$0.4 million of amortization expense related to deferred charges.

9. Accrued Liabilities

Accrued liabilities are as follows at December 31:

	2002	2001
(In thousands)		
Interest	\$7,232	\$4,780
Accrued liabilities for discontinued operations	2,900	9,280
Other	9,161	11,629
Totals	\$19,293	\$25,689

10. Financing Arrangements and Debt

Long-term debt consists of the following at December 31:

	2002	2001
(In thousands)		
Revolving Credit facility, interest tied to banks' base rate or alternative		
rates, averaged 5.5% in 2001, due April 2002 (refinanced on March		
27, 2002 from the proceeds of \$120 million 10.5% Senior Notes		
described below)	\$ -	\$97,906
Senior Notes, 10.5%, due April 2009	118,000	•
Discount on 10.5% Senior Notes, original issue discount amortized over 7		
years	(1,272)	-
Senior Notes, 7.375%, due August 2008	137,123	150,000
Discount on 7.375% Senior Notes, original issue discount amortized over		
10 years	(161)	(208)
Netherlands facility, 5.13%, due on demand	1,205	1,671
Other foreign facilities	2,034	13
	256,929	249,382
Less short-term borrowings	(1,217)	(1,684)
Totals	\$255,712	\$247,698

Aggregate maturities of long-term debt are as follows:

(In thousands)	
2003	\$1,217
2004	405
2005	405
2006	405
After 2006	254,497
Totals	\$256,929

On March 27, 2002, we obtained new financing agreements to replace our old revolving credit facility which was scheduled to mature on April 30, 2002. We issued \$120 million in principal amount of 10.5% Senior Notes that will mature in 2009. The 10.5% Senior Notes were issued pursuant to an Indenture, dated as of March 27, 2002, between us and First Union National Bank, as Trustee. The 10.5% Senior Notes (i) have interest payment dates of April 1 and October 1 of each year; (ii) are redeemable after the dates and at the prices (expressed in percentages of principal amount on the redemption date), as set forth below:

Year	<u>Percentage</u>
April 1, 2006	105.250%
April 1, 2007	102.625%
April 1, 2008 and thereafter	100.000%

(iii) are senior unsecured obligations and are senior in right of payment to any of our future subordinated obligations, (iv) are guaranteed by certain of our subsidiaries and (v) are subject to the terms of the indenture governing our 10.5% Senior Notes, which contain certain covenants, including covenants that limit our ability to incur indebtedness, make certain restricted payments and dispose of certain assets.

We also entered into a new secured revolving credit facility concurrently with the closing of the 10.5% Senior Notes offering. The new revolving credit facility provides for up to a \$37.5 million line of credit dependent on the levels of and secured by our eligible accounts receivable and inventory. The new revolving credit facility provides for interest at the Eurodollar rate plus 2.5% or the U.S. base rate plus 1%. Commitment fees on the unused available portion of the facility are 0.5%. The new revolving credit facility matures on March 27, 2005.

As of December 31, 2002, we had no outstanding obligations under our secured revolving credit facility. We had approximately \$5.6 million of standby letters of credit outstanding that are collateralized with the secured revolving credit facility and approximately \$31.9 million (subject to a \$2 million excess availability requirement) in additional borrowing availability thereunder.

Because we used proceeds from our new long-term financing agreements to refinance the 2002 maturities on our old revolving credit facility, we have reclassified all outstanding borrowings under our old facility as non-current in our consolidated balance sheet as of December 31, 2001.

In August 1998, we issued \$150 million in principal amount of 7.375% Senior Notes due August 1, 2008. The 7.375% Senior Notes were issued pursuant to an Indenture, dated as of August 4, 1998, between us and First Union National Bank, as Trustee. The 7.375% Senior Notes (i) have interest payment dates of February I and August I of each year (ii) are redeemable at our option at a redemption price equal to the greater of (a) 100% of the principal amount of the Senior Notes to be redeemed, or (b) the sum of the present value of the remaining scheduled payments of principal and interest thereon from the redemption date to the maturity date, discounted to the redemption date on a semiannual basis at a rate based upon the yield of the specified treasury securities plus 25 basis points, plus, in each case, accrued interest thereon to the date of redemption; (iii) are senior unsecured obligations and are *pari passu* in right of payment with any of our existing and future senior unsecured indebtedness, including borrowings under the Facility; (iv) are guaranteed by certain of our subsidiaries; and (v) are subject to the terms of the Indenture, which contain certain covenants that limit our ability to incur indebtedness secured by certain liens and to engage in sale/leaseback transactions.

Our financing agreements contain covenants that include requirements to maintain certain financial ratios and other restrictions and limitations, including the restrictions on our payment of

dividends, limitations on the issuance of additional debt, limitations on investments and contingent obligations, the redemption of capital stock and the sale or transfer of assets.

We have a credit facility with a Netherlands bank, payable on demand and providing for available credit up to 1.8 million euros (approximately U.S. \$1.8 million). At December 31, 2002 and December 31, 2001, we had outstanding borrowings of \$1.2 million and \$1.7 million, respectively, under this facility.

In 2002, we obtained an interest free loan from the Portuguese Government in the amount of \$1.9 million euros which equates to \$2.0 million U.S. dollars at December 31, 2002. The loan provides for repayment beginning in 2004 in installments approximating \$405,000 U.S. dollars annually based on current exchange rates. The loan matures in July 2008 and, depending on certain performance criteria of our Portugal facility, the Portuguese Government could provide a cash grant to fund the repayment of a portion of the loan.

Interest expense is net of interest income and capitalized interest of \$0.5 million and \$0.7 million in 2002, \$0.6 million and \$1.1 million in 2001 and \$1.2 million and \$1.3 million in 2000. Interest expense is also net of interest income from loans to the discontinued operations of WRI of \$0.8 million in 2002, \$1.3 million in 2001 and \$0.5 million in 2000.

In October 2002, we completed an interest rate swap on \$50.0 million notional amount of our 7.375% Senior Notes. The terms of the interest rate swap are a semi-annual payment date of February 1 and August 1, a floating rate option of the six-month LIBOR rate plus a spread of 3.76% and a termination date of August 1, 2008. The interest rate swap resulted in a reduction to interest expense in 2002 of \$0.3 million.

11. Retirement and Pension Plans

U.S. Qualified Retirement Plan

We have a U.S. Retirement Plan that is a trusteed, noncontributory defined benefit pension plan covering the majority of all our U.S. employees fulfilling minimum age and service requirements. Benefits are based upon years of service and a prescribed formula based upon the employee's compensation. We contribute annual amounts that fall within the range determined to be deductible for federal income tax purposes.

On December 31, 2002, our annual measurement date, the accumulated benefit obligation for our U.S. Retirement Plan exceeded the fair value of pension plan assets. This difference is primarily due to a decline in the fair value of the plan assets due to a sharp decrease in the equity markets at December 31, 2002. As a result and in accordance with SFAS No. 87, we recognized an additional minimum pension liability of \$17.7 million, recorded a charge to accumulated other comprehensive loss of \$16.6 million which decreased stockholders' equity and recognized an intangible asset of \$1.1 million included in deferred charges, net equal to the amount of unrecognized prior service cost. To record the \$17.7 million additional minimum pension liability, we decreased prepaid pension assets by \$9.9 million and recorded a \$7.8 million pension liability. In conjunction with the recognition of the additional minimum pension liability, we also recorded a deferred tax asset and accumulated other comprehensive income of \$6.5 million.

The accumulated benefit obligation at December 31, 2002 was \$122.7 million. The amounts recognized in the Consolidated Balance Sheets before taxes are as follows:

	2002	2001
(In thousands)		
Prepaid benefit cost	\$ -	\$6,242
Accrued benefit liability	(7,843)	-
Intangible asset	1,123	-
Accumulated other comprehensive loss	16,582	-
Net amount recognized	\$9,862	\$6,242

Certain assumptions utilized in accounting for the U.S. Retirement Plan for the years ended December 31 are as follows:

	2002	2001	2000
Discount rate	7.00%	7.25%	7.75%
Rate of increase in compensation	3 . 5	4.0	4.0
Expected return on plan assets	9.0	9.5	9.5

A summary of the components of net periodic pension cost for the U.S. Retirement Plan for the years ended December 31 is as follows:

	2002	2001	2000
(In thousands)			
Service cost	\$3,991	\$3,859	\$3,324
Interest cost	9,087	9,045	8,494
Expected return on plan assets	(11,835)	(12,613)	(12,817)
Amortization of prior service cost	136	134	134
Amortization of net actuarial gain	.		(602) _
Net periodic pension cost (benefit)	\$1,379	\$425	(\$1,467)

The following table sets forth a reconciliation of the projected benefit obligation for the years ended December 31:

	2002	2001
(In thousands)		
Benefit obligation at the beginning of the year	\$134,387	\$118,177
Service costs	3,991	3,859
Interest costs	9,087	9,045
Amendments	33	-
Actuarial loss (gain)	(8,526)	9,628
Benefits paid	(6,840)	(6,322)
Benefit obligation at the end of the year	\$132,132	\$134,387

The actuarial gain for the year ended December 31, 2002 was comprised of three components: (i) \$10.0 million gain attributable to actual salary and personnel experience that is mostly related to a 10% pay decrease for salaried participants for six months during 2001 and 2002; (ii) \$3.0

million gain due to the change in the rate of compensation increases from 4.0% to 3.5%; and (iii) \$4.5 million loss due to the change in the discount rate from 7.25% to 7.0%. For the year ended December 31, 2001, the effect of the change in our assumed discount rate from 7.75% to 7.25% contributed \$8.2 million of the \$9.6 million actuarial loss.

The following table sets forth a reconciliation of the plan assets for the years ended December 31:

	2002	2001
(In thousands)		**
Fair value of plan assets at the beginning of the year	\$127,726	\$135,700
Actual return on plan assets	(10,987)	(1,652)
Company contributions	5,000	•
Benefits paid	(6,840)	(6,322)
Fair value of plan assets at the end of the year	\$114,899	\$127,726

The following table sets forth the funded status of the plan and the amounts recognized in our consolidated balance sheets at December 31:

	2002	2001
(In thousands)		
Unfunded status	\$(17,232)	(\$6,661)
Unrecognized net actuarial loss	25,971	11,675
Unrecognized pension service costs	1,123	1,228
Prepaid pensions	\$9,862	\$6,242

U.S. Nongualified Pension Plans

We have two nonqualified pension plans in the United States. The Supplemental Benefit Restoration Plan (the "Restoration Plan") was established as of January 1, 1994 and is a nonfunded, defined benefit pension plan that provides benefits to employees identical to the benefits provided by the U.S. Retirement Plan, except that under the U.S. Retirement Plan final average annual compensation for purposes of determining plan benefits is currently capped at \$200,000. Benefits under the Restoration Plan are not subject to this limitation. However, Restoration Plan benefits are offset by any benefits payable from the U.S. Retirement Plan.

On January 1, 2002, the Supplemental Executive Retirement Plan (the "Executive Plan") was established to provide retirement benefits to executives who are employed at the level of senior vice president or above and who are approved for participation by the Compensation Committee upon the recommendation of the Chief Executive Officer. In general, the Executive Plan provides a monthly benefit to a participant at the normal retirement age of 65 of 55% of average pay reduced by benefits under the U.S. Retirement Plan, the Restoration Plan and Social Security. The annual benefit payable to the Chief Executive Officer is increased by \$6,000 for each year of service. Benefits become fully vested upon a change in control and are immediately payable in the event of a termination of employment following the change in control. Prior to 2002, there was an Agreement for Special Executive Retirement Benefits for the Chief Executive Officer (the "Agreement"). The Agreement was replaced by the Executive Plan.

On December 31, 2002, the accumulated benefit obligation for our nonqualified pension plans of \$3.5 million exceeded the plan's accrued liability of \$2.3 million. The plan had unrecognized prior service cost of \$1.4 million and thus an intangible asset equal to the additional minimum liability of \$1.2 million was established. The amounts recognized in the Consolidated Balance Sheets before taxes are as follows:

	2002	2001
(In thousands)		
Accrued Benefit Liability	\$ (3,464)	\$ (1,376)
Intangible Asset	1,181	
Net Amount Recognized	\$(2,283)	\$(1,376)

Certain assumptions utilized in accounting for the nonqualified pension plans for the years ended December 31 are as follows:

	2002	2001	2000
Discount rate	7.00%	7.25%	7.75%
Rate of increase in compensation	3.5	4.0	4.76
Expected return on plan assets	\mathbb{N}/\mathbb{A}	N/A	N/A

A summary of the components of net periodic pension cost for the nonqualified pension plans for the years ended December 31 is as follows:

	2002	2001	2000
(In thousands)			
Service cost	\$566	\$195	\$144
Interest cost	230	110	91
Amortization of prior service cost	173	31	76
Amortization of net actuarial gain	13	7	6
Net periodic pension cost	\$982	\$343	\$317

The following table sets forth a reconciliation of the projected benefit obligation for the years ended December 31:

	2002	2001
(In thousands)		
Benefit obligation at the beginning of the year	\$1,867	\$1,353
Service costs	566	195
Interest costs	230	110
Amendments	1,409	139
Actuarial loss (gain)	(99)	144
Benefits paid	(74)	(74)
Benefit obligation at the end of the year	\$3,899	\$1,867

The following table sets forth a reconciliation of the plan assets for the years ended December 31:

	2002	2001
(In thousands)		
Fair value of plan assets at the beginning of the year	\$ -	\$ -
Company contributions	74	74
Benefits paid	(74)	(74)
Fair value of plan assets at the end of the year	\$ -	\$ -

The following table sets forth the funded status of the plan and the amounts recognized in our consolidated balance sheets at December 31:

	2002	2001
(In thousands)		
Unfunded status	\$ (3,899)	\$ (1,867)
Unrecognized net actuarial loss	200	312
Unrecognized pension service costs	1,415	179
Accrued Benefit Cost	\$ (2,284)	\$ (1,376)

We also have 401(k) plans covering substantially all of our U.S. employees. We provide at our discretion a match of employee salaries contributed to the plans. We recorded expense with respect to these plans of \$0.3 million in 2002, \$1.3 million in 2001 and \$2.0 million in 2000. Beginning in September 2001 and continuing in 2002 we eliminated our match for all highly compensated individuals and reduced our match for all other employees.

Canadian Plans

We sponsor a defined contribution profit-sharing retirement plan for our London, Ontario facility employees who are required to contribute 4% of regular wages, subject to a maximum contribution limit specified by Canadian income tax regulations. Employer contributions were \$0.5 million in 2002, \$0.5 million in 2001 and \$0.6 million in 2000.

We have established three noncontributory defined benefit pension plans covering substantially all our employees at the Fergus, Montreal and Quebec, Ontario facilities. The three plans are the Wolverine Ratcliffs Inc. Pension Plan for Operational Employees (the "WRI Plan"), the Wolverine Tube (Canada) Inc. Pension Plan for Salaried Employees (the "Salaried Plan") and the Wolverine Tube (Canada) Inc. Pension Plan for Operational Employees (the "Canada Operational Plan"). We contribute the actuarially determined amounts annually into the plans. Benefits for the hourly employees at the Montreal, Quebec and Fergus, Ontario facilities are based on years of service and a negotiated rate. Benefits for salaried employees are based on years of service and the employee's highest annual average compensation over five consecutive years.

The WRI Plan covering hourly employees at our Fergus facility whose operations were discontinued was wound-up as of July 1, 2002 and a wind-up actuarial valuation was prepared as of that date. The Salaried Plan was partially wound-up as of July 1, 2002 with regard to the termination of the salaried employees who were working at the Fergus facility. The benefits payable under these plans for our Fergus employees were not settled as of December 31, 2002, but we have estimated in our December 31, 2002 valuation the impact of the settlement that is

expected to occur as of September 1, 2003. The pension liability recorded for the WRI Plan is \$0.9 million at December 31, 2002.

On December 31, 2002, the accumulated benefit obligation for the Salaried Plan and the Canada Operational Plan exceeded the fair value of pension plan assets, primarily due to a decline in the fair value of the plan assets due to a sharp decrease in the equity markets at December 31, 2002. As a result and in accordance with SFAS No. 87, we recognized an additional minimum pension liability of \$3.0 million, recorded a charge to accumulated other comprehensive loss of \$2.1 million and recognized an intangible asset of \$0.9 million included in deferred charges, net equal to the amount of unrecognized prior service cost. To record the \$3.0 million additional minimum pension liability, we decreased prepaid pension assets by \$0.7 million and recorded a \$2.3 million pension liability. In conjunction with the recognition of the additional minimum pension liability, we also recorded a deferred tax asset and accumulated other comprehensive income of \$0.7 million.

The accumulated benefit obligation at December 31, 2002 for the Salaried Plan and the Canada Operational Plan was \$16.4 million. The amounts recognized in the Consolidated Balance Sheets before taxes are as follows:

	2002	2001_
(In thousands)		
Prepaid Benefit Cost	\$ -	\$ 2,377
Accrued Benefit Liability	(3,234)	=
Intangible Asset	946	-
Accumulated Other Comprehensive Loss	2,120	-
Net Amount Recognized	\$(168)	\$2,377

Certain assumptions utilized in accounting for the Canadian pension plans for the years ended December 31 are as follows:

	2002	2001	2000
Discount rate	6.75%	7.0%	7.5%
Expected long-term rate of return on plan assets	7.5	8.5	8.5

The expected rate of increase in compensation used in accounting for the Salaried Plan was 3.0% for the years ended December 31, 2002, 2001 and 2000, and is not applicable in accounting for the Canada Operational Plan and the WRI Plan for the same periods.

A summary of the components of net periodic pension cost for the three pension plans for the years ended December 31 are as follows:

	2002	2001	2000
(In thousands)			
Service cost	\$486	\$498	\$522
Interest cost	1,257	1,240	1,317
Expected return on plan assets	(1,603)	(1,793)	(1,748)
Effect of Settlement	2,471	-	-
Amortization of prior service cost	91	73	77
Amortization of net actuarial gain	(3)	(118)	(62)
Net periodic pension cost (benefit)	\$2,699	(\$100)	\$106

The following table sets forth a reconciliation of the benefit obligation for the years ended December 31:

	2002	2001
(In thousands)		
Benefit obligation at the beginning of the year	\$18,465	\$17,007
Service costs	486	497
Interest costs	1,257	1,240
Amendments	291	-
Actuarial loss (gain)	(207)	1,736
Benefits paid	(1,146)	(921)
Estimated settlement of benefits	(2,393)	-
Foreign currency exchange rate changes	175	(1,094)
Benefit obligation at the end of the year	\$16,928	\$18,465

The following table sets forth a reconciliation of the plans assets for the years ended December 31:

	2002	2001
(In thousands)		
Fair value of plan assets at the beginning of the year	\$19,259	\$22,123
Actual return on plan assets	(1,611)	(850)
Company contribution	143	179
Benefits paid	(1,146)	(921)
Estimated Settlement of Benefits	(3,647)	-
Foreign currency exchange rate changes	160	(1,272)
Fair value of plan assets at the end of the year	\$13,158	\$19,259

The following table sets forth the funded status of the plans and the amounts recognized in our consolidated balance sheets at December 31:

	2002	2001
(In thousands)		
Funded status	\$(3,770)	\$794
Unrecognized net actuarial loss	2,656	548
Unrecognized pension service costs	946	1,035
Prepaid (Accrued) benefit cost	\$ (168)	\$2,377

The schedules for the Canadian plans include the following amounts for the discontinued operations of WRI (see Note 2): a (\$2.3) million decrease in benefit obligation; a (\$3.7) million decrease in plan assets; an accrued liability of \$0.9 million; and \$2.5 million in net periodic benefit costs.

12. Postretirement Benefit Obligation

We sponsor a defined benefit health care plan and life insurance plan that provides postretirement medical benefits and life insurance to substantially all our full-time employees who have worked ten years after age 50 to 52, and spouses of employees who die while employed after age 55 and have at least five years of service. This plan is contributory, with retiree contributions being adjusted annually.

Net periodic postretirement benefit cost for the years ended December 31 includes the following components:

	2002	2001	2000
(In thousands)			
Service cost	\$613	\$431	\$384
Interest cost	1,034	685	687
Amortization of prior service cost	126	126	85
Amortization of deferred gain	(126)	(411)	(284)
Effect of special termination benefits	(386)	199	55
Net periodic postretirement benefit cost	\$1,261	\$1,030	\$927

The change in benefit obligation for the years ended December 31 includes the following components:

	2002	2001
(In thousands)		
Benefit obligation at the beginning of the year	\$15,032	\$14,486
Service cost	613	431
Interest cost	1,034	685
Participants' contributions	504	227
Amendments	-	37
Actuarial loss	21	1,670
Benefits paid	(2,030)	(2,703)
Special termination benefits	(401)	199
Foreign currency exchange rate changes	315	<u>-</u>
Benefit obligation at the end of the year	\$15,088	\$15,032

The following table sets forth the status of the plan and the amounts recognized in our consolidated balance sheets at December 31:

	2002	2001
(In thousands)		
Benefit obligation at end of year	\$15,088	\$15,032
Unrecognized net actuarial gain	1,135	1,371
Unrecognized prior service cost	(557)	(683)
Net postretirement benefit obligation	\$15,666	\$15,720

The weighted average discount rate used in determining the postretirement benefit obligation was 7.0% at December 31, 2002 and 7.25% at December 31, 2001.

For purposes of determining the cost and obligation for postretirement medical benefits, a 5% annual rate of increase in the per capita cost of covered benefits (i.e. health care trend rate) was assumed, and is expected to remain at that level thereafter. Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A one percent change in the assumed health care cost trend rate would have had the following effects:

	1% Increase	1% Decrease
(In thousands)		
Effect on total of service and interest cost components	\$10	\$(9)
Effect on postretirement benefit obligation	\$149	\$(133)

13. Environmental Remediation

We are subject to extensive environmental regulations imposed by federal, state, provincial and local authorities in the U.S., Canada, China and Portugal with respect to emissions to air, discharges to waterways, and the generation, handling, storage, transportation, treatment and disposal of waste materials. We have received various communications from regulatory authorities concerning certain environmental matters.

We have accrued undiscounted estimated environmental remediation costs of \$1.5 million at December 31, 2002, consisting of \$0.6 million for the Decatur facility, \$44,000 for the Greenville facility, \$58,000 for the Altoona facility and \$0.8 million for the Ardmore facility. Based on information currently available, we believe that the costs of these matters are not reasonably likely to have a material effect on our business, financial condition or results of operations. However, actual costs related to environmental matters could differ materially from the amounts we estimated and accrued at December 31, 2002 and could result in additional exposure if these environmental matters are not resolved as anticipated.

14. Income Taxes

The components of income from continuing operations before income taxes for the years ended December 31 are as follows:

	2002	2001	2000
(In thousands)			
U.S.	\$(6,933)	\$(170)	\$17,103
Foreign	15,418	15,957	23,464
Total	\$8,485	\$15,787	\$40,567

The provision for income taxes for the years ended December 31 consists of the following:

	2002	2001	2000
(In thousands)			
Continuing operations			
Current (benefit) expense:			
U.S. Federal	\$(5,308)	\$2,675	\$1,696
Foreign	2,185	4,387	7,354
State	693	(732)	95
Total current	(2,430)	6,330	9,145
Deferred (benefit) expense:			
U.S.	2,547	(1,741)	5,745
Foreign	1,198	(244)	(230)
Total deferred	3,745	(1,985)	5,515
Total income tax expense (benefit) –continuing operations	\$1,315	\$4,345	\$14,660
Income tax expense (benefit) – discontinued operations	(936)	(12,100)	506
Total income tax expense (benefit)	\$379	\$(7,755)	\$15,166

Deferred income taxes included in our balance sheets reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the carrying amount for income tax return purposes. Significant components of our deferred tax assets and liabilities are as follows:

	2002	2001
(In thousands)		
Deferred tax liabilities:		
Basis of property, plant and equipment	\$31,522	\$30,012
Prepaid pension	4,034	2,746
Other	2,540	833
Total deferred tax liabilities	38,096	33,591
Deferred tax assets:		
Environmental remediation	554	704
Net operating loss carryforward	12,281	15,127
Restructuring reserves	627	1,935
Inventory valuations	315	270
Pension obligation	12,988	6,269
Other	4,700	2,992
Total deferred tax assets	31,465	27,297
Valuation allowance	(2,385)	
Total deferred tax assets net of valuation allowance	29,080	27,297
Net deferred tax liability	\$9,016	\$6,294

Reconciliation of differences between the statutory U.S. federal income tax rate and our effective tax rate follows:

	2002	2001	2000
(In thousands)			
Income tax expense at federal statutory rate	\$2,885	\$5,525	\$14,198
Increase (decrease) in taxes resulting from:			
State and local taxes, net of federal benefit	443	185	369
Effect of difference in U.S. and foreign rates	(1,858)	(1,363)	(894)
Permanent differences	21	12	523
Other	(176)	(14)	464
Income tax expense –continuing operations	\$1,315	\$4,345	\$14,660

At December 31, 2002, we have state and foreign net operating loss carryforwards of \$89 million and \$21 million, respectively. These net operating loss carryforwards expire at various times beginning in 2016 through 2022. A valuation allowance of \$2.4 million was established in the current year to offset a portion of the deferred tax amount relating to state net operating losses.

The tax rate for our operations in China was 0% in 2001 and 2000, reflecting our contractual tax holiday agreement with the Chinese government. Under this agreement, the tax rate was increased to 7.5% beginning January 1, 2002 and will remain at this rate for the next three years, increasing in 2005 to a 15% maximum rate.

15. Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss at December 31, are as follows:

	Foreign Currency Translation Adjustment	Unrealized Gain (Loss) on Cash Flow Hedges, Net of Tax	Minimum Pension Liability Adjustment, Net of Tax	Accumulated Other Comprehensive Loss	
(In thousands)					
Balance at December 31, 1999	\$(10,688)	\$ -	\$ -	\$(10,688)	
Activity in 2000	(3,632)		_	(3,632)	
Balance at December 31, 2000	(14,320)	-	-	(14,320)	
Activity in 2001	(5,681)	(1,897)	-	(7,578)	
Balance at December 31, 2001	(20,001)	(1,897)	-	(21,898)	
Activity in 2002	2,201	(140)	(11,535)	(9,474)	
Reclassification adjustment for realized cash flow hedge losses	<u>-</u>	1,781		1,781	
Balance at December 31, 2002	\$(17,800)	\$ (256)	\$(11,535)	\$(29,591)	

16. Redeemable Cumulative Preferred Stock

We have 500,000 shares authorized for issuance of \$1 par value cumulative preferred stock. At December 31, 2002, there are no shares of cumulative preferred stock issued and outstanding. As of December 31, 2001, there were 20,000 shares of cumulative preferred stock issued and outstanding that we redeemed on March 1, 2002 by paying \$1.0 million in cash and issuing 116,100 shares of our common stock at a share price of \$8.61.

The cumulative preferred stock provided for annual dividends at the rate of \$14 per share. The dividends accrued quarterly whether declared or not, and compounded quarterly at 14% per annum to the extent unpaid. At December 31, 2002 and 2001, all dividends had been paid. The cumulative preferred stock is entitled to a preference, in liquidation, in the amount of \$100 per share, plus any accrued and unpaid dividends and any related interest.

17. Common Stock

All holders of Common Stock are entitled to receive dividends when and if declared by our Board of Directors (the "Board"), provided that all dividend requirements of the cumulative preferred stock have been paid. Additionally, the payment of dividends on our Common Stock is restricted under the terms of our various financing agreements. To date, no dividends have been paid to the holders of the Common Stock and there are no immediate plans to institute a dividend.

The Board has adopted a Stockholder Rights Plan designed to protect the Company and its stockholders from coercive, unfair or inadequate takeover bids. Pursuant to the Stockholder

Rights Plan, a dividend of one Preferred Share Purchase Right (a "Right") was declared for each share of Common Stock outstanding at the close of business on February 23, 1996. The Rights are generally not exercisable until ten days after a person or group acquires, or commences a tender offer that could result in the party acquiring, 15% of the outstanding shares of Common Stock. Each Right, should it become exercisable, will enable the owner to buy one one-thousandth of a share of newly created Series A Junior Participating Preferred Stock at an exercise price of \$175, and, in certain circumstances, to purchase shares of Common Stock at a substantially reduced price. The Board is generally entitled to redeem the Rights at \$0.01 per Right at any time prior to the date they become exercisable. The Rights will expire on February 23, 2006.

Beginning in September 1998, the Board of Directors authorized management to purchase shares of our outstanding Common Stock in the open market under common stock repurchase programs. These common stock repurchase programs concluded March 31, 2002. Under the common stock repurchase programs, we purchased 537,600 shares, 858,100 shares and 784,200 shares of our Common Stock for \$7.5 million, \$15.4 million and \$16.6 million for the years ended December 31, 2000, 1999 and 1998, respectively. We did not purchase any shares of our Common Stock in the years ended December 31, 2002 or 2001.

18. Stock-Based Compensation Plans

We have elected to follow APB 25, Accounting for Stock Options Issued to Employees and related interpretations in accounting for our employee and outside director stock options because, as discussed below, the alternative fair value accounting provided for under SFAS No. 123 ("Statement 123"), Accounting for Stock-Based Compensation, requires use of option valuation models that were not developed for use in valuing employee and outside director stock options. Under APB 25, no compensation expense is recognized because the exercise price of our employee and outside director stock options equals the market price of the underlying stock on the date of the grant.

Pro forma information regarding net income and earnings per share is required by Statement 123, and has been determined as if we had accounted for our employee and outside director stock options under the fair value method of that statement. The weighted average fair value of options granted during 2002 estimated on the date of grant using the Black-Scholes pricing model was \$3.58. The fair value for these options was estimated at the date of grant using the following weighted average assumptions for 2002, 2001 and 2000, respectively: risk free interest rates of 3.67%, 4.41% and 6.12%, volatility factors of the expected market price of our Common Stock of 0.385, 0.352 and 0.339; and a weighted average expected life of the option of 5.6, 7.0 and 7.0 years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because our employee and outside director stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in our opinion, the

existing models do not necessarily provide a reliable single measure of the fair value of our employee and outside director stock options.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The effects of applying Statement 123 for pro forma disclosure may not be representative of the effects on reported pro forma net income in future years. Our pro forma information for the years ended December 31 follows:

	2002	2001	2000
(In thousands, except per share amounts)			
Basic earnings (loss) applicable to common shares:			
As reported	\$5,502	(\$20,078)	\$26,409
Pro forma	3,256	(22,911)	23,181
Diluted earnings (loss) applicable to common shares:			
As reported	\$0.45	(\$1.63)	\$2.14
Pro forma	\$0.27	(\$1.89)	1.91

The 1993 Equity Incentive Plan (the "1993 Equity Plan") provides for the issuance of stock options, restricted shares, stock appreciation rights, and other additional awards to key executives and employees. The maximum number of shares issuable under the 1993 Equity Plan is 2,075,000 at a price as determined by our Compensation Committee. All options granted to date have been issued at the market value at the date of the grant. Options granted prior to 1999 under the 1993 Equity Plan vest 20% on each anniversary thereafter and terminate on the tenth anniversary of the date of grant. Options granted in 1999 and subsequent years under the 1993 Equity Plan vest 333% on each anniversary thereafter and terminate on the tenth anniversary of the date of grant. Options granted under prior plans remain outstanding but are governed by the provisions of the 1993 Equity Plan. The 1993 Equity Plan will terminate by its terms in 2003.

The 1993 Stock Option Plan for Outside Directors (the "1993 Directors' Plan") provides for the issuance of stock options to outside directors at the fair market value on the date of grant. A maximum of 185,000 shares are issuable under the 1993 Directors' Plan. The initial options granted at the time the Director joins the Board vest at 333% per year but must be held one year before being exercised. All subsequent options granted vest immediately. All options terminate on the tenth anniversary of the date of grant. The 1993 Director's Plan terminates in 2003.

On March 22, 2001, the Board of Directors adopted the 2001 Stock Option Plan for Outside Directors (the "2001 Directors' Plan") providing for the issuance of options for the purchase of up to 250,000 shares of our common stock. The 2001 Directors' Plan will allow us to continue to compensate and reward our directors upon the termination of the 1993 Directors' Plan. The terms of the 2001 Directors' Plan are substantially the same as the terms of the 1993 Directors' Plan.

In the third quarter of 2001, we made available to our U.S. and Canadian stock option holders under the 1993 Equity Plan and the 1993 Directors' Plan the right to exchange options whose exercise price was \$20.00 per share or greater, for new options to purchase one share for every two shares exchanged. We made the exchange offer available because a large number of stock options had exercise prices that were significantly higher than current trading prices of our Common Stock, and thus the stock options did not provide our employees and outside directors

the incentive to acquire and maintain stock ownership in the Company and to participate in the Company's long-term growth and success. As a result of this exchange of options, 836,860 shares with an average option price of \$30.48 were canceled, 38,000 of which were under the 1993 Directors' Plan. On April 11, 2002, six months and six business days after the date the options were exchanged, we granted 383,075 stock options, 19,000 of which were under the 1993 Directors' Plan. New options granted under the 1993 Equity Plan have an exercise price of \$8.60 per share, which was the closing price of our common stock on April 11, 2002. New options granted under the 1993 Directors' Plan have an exercise price of \$8.84 per share which was determined by the average market price of our stock on April 11, 2002 and the four preceding trading days. A stock option holder must have continued to have been employed by us or provide service to us through April 11, 2002 in order to have been eligible to receive the new options granted.

Our stock option plans are summarized as follows:

	2001 Directors' Plan	1993 Directors' Plan	1993 Equity Incentive Plan	Option Price	Weighted- Average Exercise Price
		(Number of Sha	res)		
Outstanding at December 31, 1999	-	53,000	1,076,358	\$4.44 - \$40.25	\$28.04
Granted	-	50,200	343,950	\$11.95 - \$17.01	\$13.90
Exercised	-	-	(4,680)	\$4.44 - \$7.39	\$6.24
Forfeited	-	 -	(108,386)	\$12.31 - \$38.44	\$26.79
Outstanding at December 31, 2000	-	103,200	1,307,242	\$4.44 - \$40.25	\$24.25
Granted	-	51,465	394,650	\$11.84 - \$16.57	\$11.93
Exercised	-	=	(24,261)	\$4.44 - \$13.69	\$5.42
Forfeited	<u> </u>	(38,000)	(841,957)	\$7.39 - \$40.25	\$30.20
Outstanding at December 31, 2001	-	116,665	835,674	\$5.28 - \$37.68	\$13.46
Granted	26,362	59,724	570,638	\$6.13 - \$11.35	\$8.63
Exercised	-	-	(27,990)	\$5.28 - \$7.39	\$6.01
Forfeited	<u>-</u>	(16,205)	(89,400)	\$8.60 - \$37.68	\$19.19
Outstanding at December 31, 2002	26,362	160,184	1,288,922	\$6.13 - \$25.25	\$11.04
Exercisable at:					
December 31, 2000	-	99,866	574,600	\$4.44 - \$40.25	\$26.12
December 31, 2001	-	116,665	223,961	\$5.28 - \$37.68	\$14.78
December 31, 2002	26,362	160,184	723,813	\$7.39 - \$25.25	\$11.12

The number of options outstanding, weighted average exercise price, weighted average remaining contractual life, vested options and the weighted average exercise price of vested options outstanding at December 31, 2002, which were issued prior to August 1993, were 31,518, \$7.39, 0.2 years, 31,518 and \$7.39, respectively. The number of options outstanding, weighted average exercise price, weighted average remaining contractual life, vested options and

the weighted average exercise price of vested options outstanding at December 31, 2002, which were issued after August 1993, were 1,443,950, \$11.12, 7.2 years, 878,841 and \$11.25, respectively. The weighted average remaining life for all options outstanding at December 31, 2002 is 7.1 years.

The range of exercise prices of the outstanding options and exercisable options at December 31, 2002 are as follows:

	Number of	Number of	Weighted Average
Weighted Average Exercise Price	Exercisable Shares	Outstanding Shares	Remaining Life
\$6.13 - \$14.99	850,610	1,406,068	7.06
\$15.00 - \$24.99	58,599	68,250	6.40
\$25.00 - \$25.25	1,150	1,150	2.20
Totals	910,359	1,475,468	7.03

In 2002, we awarded 50,619 shares of restricted stock under the 1993 Equity Plan, with a fair value at the date of grant of \$8.57 per share. These restricted shares vest 50% annually at the anniversary date of the grant. We recorded compensation expense with respect to restricted stock awards of approximately \$0.3 million in 2002 which is recognized on a straight-line basis over the two year vesting period of the restricted stock grants. In addition, selected senior executives as designated by the CEO and approved by the Compensation Committee are eligible for restricted stock awards under the Long-Term Incentive Program ("LTIP") based on our return on total capital measured over a three-year period. Performance objectives under the LTIP are based upon an incremental scale depending on achieving the specified target return rate. No compensation expense was recorded in 2002, 2001 or 2000 with respect to these awards and there are no outstanding grants under the program.

19. Commitments

Minimum future rental commitments under operating leases having non-cancelable lease terms in excess of one year totaled approximately \$11.5 million as of December 31, 2002 and are payable as follows: \$3.5 million in 2003, \$2.9 million in 2004, \$2.0 million in 2005, \$0.9 million in 2006, \$0.6 million in 2007 and \$1.6 million thereafter. Rental expense for operating leases was \$4.9 million in 2002, \$2.9 million in 2001 and \$3.3 million in 2000.

At December 31, 2002, we had commitments of \$1.2 million for capital expenditures.

20. Industry Segments and Foreign Operations

Our reportable segments are based on our three product lines: commercial products, wholesale products and rod, bar and other products. Commercial products consist primarily of high value-added products sold directly to original equipment manufacturers. Wholesale products are commodity-type plumbing tube products, which are primarily sold to plumbing wholesalers and distributors. Rod, bar and other consists of products sold to a variety of customers and includes our European distribution business.

The accounting policies for each of the reportable segments are the same as those described in Note 1. We evaluate the performance of our operating segments based on sales and gross profit;

however, we do not allocate asset amounts and items of income and expense below gross profit or depreciation and amortization.

Summarized financial information concerning our reportable segments is shown in the following table:

	Commercial	Wholesale	Rod, Bar & Other	Consolidated
(In thousands)				
Year ended December 31, 2002				
Sales	\$421,234	\$93,938	\$35,351	\$550,523
Gross profit	51,736	4,352	2,353	58,441
Year ended December 31, 2001:				
Sales	\$444,209	\$97,570	\$41,335	\$583,114
Gross profit	50,140	9,326	2,774	62,240
Year ended December 31, 2000:				
Sales	\$487,416	\$96,993	\$37,055	\$621,464
Gross profit	69,987	12,639	2,487	85,113

Our manufacturing operations are primarily conducted in the U.S. and Canada. We also have a manufacturing facility in Shanghai, China and in 2001, we opened a manufacturing facility in Esposende, Portugal. In 2002, 2001 and 2000, no customer accounted for as much as 10% of our net sales.

Sales by customer location and long-lived assets by geographic location of our facilities is as follows:

	U.S.	Canada	Other Foreign Operations	Consolidated
(In thousands)				
Year ended December 31, 2002:				
Sales	\$417,000	\$78,000	\$56,000	\$551,000
Long-lived assets	288,459	30,563	12,679	331,701
Year ended December 31, 2001:				
Sales	\$434,000	\$81,000	\$68,000	\$583,000
Long-lived assets	294,413	31,820	10,291	336,524
Year ended December 31, 2000:				
Sales	\$478,000	\$92,000	\$51,000	\$621,000
Long-lived assets	294,267	43,649	2,432	340,348

21. Restructuring and Other Charges

During the third quarter of 2001, we recognized restructuring and other charges of \$1.5 million (\$1.0 million net of tax). We accrued and charged to expense \$1.1 million for severance benefits for approximately 40 salaried and hourly employees. We offered a voluntary separation program to employees at several of our facilities due to lack of demand for these facilities' products, the criteria for which was dependent on the employee's age, job duties and years of service. We separated these employees in order to reduce costs for anticipated continued weakness in sales volumes and mix and anticipated reductions of capacity utilization. We also accrued and

charged to expense a \$0.2 million write-off of impaired assets and \$0.2 million related to a previously closed facility. As of December 31, 2001, we had separated 40 employees and had accrued \$0.3 million of restructuring cost representing our remaining cash obligations. In 2002 we paid approximately \$0.3 million in cash related to the restructuring and anticipate no further obligations.

22. Earnings Per Share

The following table sets forth the computation of earnings per share for the years ended December 31:

	2002	2001	2000
(In thousands, except per share amounts)			
Income from continuing operations	\$7,170	\$11,442	\$25,907
Income (loss) from discontinued operations, net of			
tax	(1,610)	(31,240)	782
Net income (loss)	5,560	(19,798)	26,689
Dividends on preferred stock	(58)	(280)	(280)
Net income (loss) available to common shares	\$5,502	(\$20,078)	\$26,409
Basic weighted average common shares	12,231	12,077	12,153
Stock options	131	230	191
Diluted weighted average common and common			
equivalent shares (1)	12,362	12,307	12,344
Earnings per common share—basic:			
Income from continuing operations	\$0.58	\$0.92	\$2.11
Income (loss) from discontinued operations	(0.13)	(2.58)	0.06
Net income (loss) per common share –basic	\$0.45	(\$1.66)	\$2.17
Earnings per common share—diluted:			
Income from continuing operations	\$0.58	\$0.91	\$2.08
Income (loss) from discontinued operations	(0.13)	(2.54)	0.06
Net income (loss) per common share –diluted	\$0.45	(\$1.63)	\$2.14

⁽¹⁾ For the year ended December 31, 2002, 2001 and 2000, there were 1.5 million, 0.4 million and 1.0 million antidilutive or out-of-the-money stock options that were excluded from the calculation of diluted weighted average common and common equivalent shares.

23. Quarterly Results of Operations (Unaudited)

The following is a summary of the unaudited quarterly results of operations for the years ended December 31, 2002 and 2001.

2002	March 31	June 30	September 29	December 31
(In thousands, except per share amounts)	£127 542	0152547	#12.4.01 <i>#</i>	#125.616
Net sales Gross profit	\$137,543 14,323	\$152,547 19,212	\$134,817 14,470	\$125,616 10,436
Income from continuing operations	1,688	3,486	1,827	10,436
Loss from discontinued operations, net of	1,000	3,400	1,027	109
tax	-	-	_	(1,610)
Net income (loss)	\$1,688	\$3,486	\$1,827	\$(1,441)
Basic earnings per common share:				
Income from continuing operations	\$0.13	\$0.28	\$0.15	\$0.01
Loss from discontinued operations	-	-	-	(0.13)
Net income (loss)	\$0.13	\$0.28	\$0.15	\$(0.12)
Diluted earnings per common share:				
Income from continuing operations	\$0.13	\$0.28	\$0.15	\$0.01
Loss from discontinued operations		•		(0.13)
Net income (loss)	\$0.13	\$0.28	\$0.15	\$(0.12)

2001	April 1	July 1	September 30	December 31
(In thousands, except per share amounts)				
Net sales	\$172,437	\$161,517	\$136,103	\$113,057
Gross profit	21,766	15,792	14,912	9,770
Restructuring and other charges	-	-	1,546	(5.50)
Income (loss) from continuing operations	6,975	3,082	2,137	(752)
Loss from discontinued operations, net of tax	(848)	(3,643)	(938)	(25,811)
Net income (loss)	\$6,127	\$(561)	\$1,199	\$(26,563)
Basic earnings per common share:	φ0,127	\$(501)	Ψ1,122	(20,202)
Income (loss) from continuing operations	\$0.57	\$0.25	\$0.17	\$(0.07)
				, ,
Loss from discontinued operations	(0.07)	(0.30)	(0.08)	(2.13)
Net income (loss)	\$0.50	\$(0.05)	\$0.09	\$(2.20)
Diluted earnings per common share:				
Income (loss) from continuing operations	\$0.56	\$0.24	\$0.17	\$(0.07)
Loss from discontinued operations	(0.07)	(0.29)	(0.08)	(2.13)
Net income (loss)	\$0.49	\$(0.05)	\$0.09	\$(2.20)

24. Condensed Consolidating Financial Information

The following tables present condensed consolidating financial information for: (a) Wolverine Tube, Inc. (the "Parent") on a stand-alone basis; (b) on a combined basis, the guarantors of the 10.5% Senior Notes ("Subsidiary Guarantors"), which include TF Investor, Inc.; Tube Forming, L.P.; Wolverine Finance, LLC; Wolverine China Investments, LLC; STPC Holding, Inc.; Small Tube Manufacturing, LLC; Wolverine Joining Technologies, LLC; and Tube Forming Holdings, Inc.; and (c) on a combined basis, the Non-Guarantor Subsidiaries, which include Wolverine Tube (Canada) Inc.; 1263143 Ontario, Inc.; 1158909 Ontario, Inc.; 1105836 Ontario, Inc.; Wolverine Tube (Shanghai) Co., Limited; Wolverine European Holdings BV; Wolverine Tube Europe BV; Wolverine Tube, BV; Wolverine Tubagem (Portugal), Lda; Wolverine Joining Technologies Canada, Inc.; Ratcliffs Copper and Brass Sales, Ltd.; Wolverine Europe; Wolverine Asia, Limited; and Small Tube Europe NV. Each of the Subsidiary Guarantors is wholly-owned by Wolverine Tube, Inc. The guarantees issued by each of the Subsidiary Guarantors are full, unconditional, joint and several. Accordingly, separate financial statements of the wholly-owned Subsidiary Guarantors are not presented because the Subsidiary Guarantors are jointly, severally and unconditionally liable under the guarantees, and we believe separate financial statements and other disclosures regarding the Subsidiary Guarantors are not material to investors. Furthermore, there are no significant legal restrictions on the Parent's ability to obtain funds from its subsidiaries by dividend or loan.

The parent is comprised of Alabama, Oklahoma, Tennessee, and Mississippi manufacturing operations and certain corporate management, sales and marketing, information services and finance functions.

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Statements of Income For the Year Ended December 31, 2002

	Parent	Subsidiary Guarantors	Guarantor Subsidiaries	Eliminations	Consolidated
(In thousands)	Tarent	Guarantors	Substanties	Ziiiiiiiiiiiii	Consonantea
Net sales	\$293,035	\$119,340	\$177,766	\$(39,618)	\$550,523
Cost of goods sold	271,871	102,591	157,238	(39,618)	492,082
Gross profit	21,164	16,749	20,528		58,441
Selling, general and administrative expenses	24,137	2,904	3,575	-	30,616
Operating income (loss) from continuing					
operations	(2,973)	13,845	16,953	-	27,825
Other (income) expenses:					
Interest expense, net	20,489	(24)	(784)	-	19,681
Gain on extinguishment of debt	(1,349)	-	-	-	(1,349)
Amortization and other, net	4,145	(5,041)	1,904		1,008
Income (loss) from continuing operations before					
income taxes	(26,258)	18,910	15,833	-	8,485
Income tax provision (benefit)	(9,530)	7,461	3,384		1,315
Income (loss) from continuing operations	(16,728)	11,449	12,449	-	7,170
Loss from discontinued operations, net of tax	(1,117)	(801)	308	-	(1,610)
Equity in earnings of subsidiaries	23,405		-	(23,405)	<u> </u>
Net income	\$5,560	\$10,648	\$12,757	\$(23,405)	\$5,560

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Statements of Income For the Year Ended December 31, 2001

		Subsidiary	Non- Guarantor		
	Parent	Guarantors	Subsidiaries	Eliminations	Consolidated
(In thousands)					
Net sales	\$307,498	\$126,716	\$178,544	\$(29,644)	\$583,114
Cost of goods sold	276,764	114,237	159,517	(29,644)	520,874
Gross profit	30,734	12,479	19,027	-	62,240
Selling, general and administrative expenses	23,755	4,853	3,646	-	32,254
Restructuring and other charges	1,089	397	60		1,546
Operating income from continuing operations	5,890	7,229	15,321	_	28,440
Other (income) expenses:					
Interest expense, net	14,895	(153)	(1,642)	-	13,100
Amortization and other, net	2,515	(4,483)	1,521		(447)
Income (loss) from continuing operations before					<u> </u>
income taxes	(11,520)	11,865	15,442	_	15,787
Income tax provision (benefit)	(4,674)	4,893	4,126	_	4,345
Income (loss) from continuing operations	(6,846)	6,972	11,316	-	11,442
Loss from discontinued operations, net of tax	-	-	(31,240)	_	(31,240)
Equity in losses of subsidiaries	(12,952)			12,952	
Net income (loss)	\$(19,798)	\$6,972	\$(19,924)	\$12,952	\$(19,798)

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Statements of Income For the Year Ended December 31, 2000

	Parent	Subsidiary Guarantors	Non- Guarantor Subsidiaries	Eliminations	Consolidated
(In thousands)				-	
Net sales	\$356,101	\$112,865	\$182,130	\$(29,632)	\$621,464
Cost of goods sold	303,888	98,811	163,284	(29,632)	536,351_
Gross profit	52,213	14,054	18,846	-	85,113
Selling, general and administrative expenses	25,397	3,924	2,640		31,961
Operating income from continuing operations	26,816	10,130	16,206	-	53,152
Other (income) expenses:					
Interest expense, net	14,596	(399)	(2,029)	-	12,168
Amortization and other, net	<u>1</u> 1,691	(6,651)	(4,623)	-	417_
Income from continuing operations before income					
taxes	529	17,180	22,858	-	40,567
Income tax provision	263	7,274	7,123	-	14,660
Income from continuing operations	266	9,906	15,735	-	25,907
Income from discontinued operations, net of tax	-	-	782	-	782
Equity in earnings of subsidiaries	26,423	-	-	(26,423)	<u>-</u> _
Net income	\$26,689	\$9,906	\$16,517	\$(26,423)	\$26,689

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Balance Sheets December 31, 2002

	Parent	Subsidiary Guarantors	Non- Guarantor Subsidiaries	Eliminations	Consolidated
(In thousands)					•
Assets					
Current assets					
Cash and equivalents	\$22,461	s -	\$31,459	\$ -	\$53,920
Accounts receivable, net	275	43,027	21,910	-	65,212
Inventories	47,731	15,964	21,790	-	85,485
Refundable income taxes	10,796	(2,703)	(1,746)	-	6,347
Prepaid expenses and other	5,032	2,496	527	-	8,055
Total current assets	86,295	58,784	73,940	-	219,019
Property, plant and equipment, net	140,036	33,727	35,236	-	208,999
Deferred charges, net	12,411	23	1,377	-	13,811
Goodwill, net	23,154	75,521	1,425	-	100,100
Assets held for sale	5,428	-	3,363	-	8,791
Investments in subsidiaries	368,585	302	<u>-</u>	(368,887)	-
Total assets	\$635,909	\$168,357	\$115,341	\$(368,887)	\$550,720
Liabilities and Stockholders' Equity					
Current liabilities					
Accounts payable	\$18,310	\$2,714	\$9,267	S (1)	\$30,290
Accrued liabilities	10,831	1,001	7,461	•	19,293
Short-term borrowings	· -	· -	1,217	-	1,217
Intercompany balances	116,757	(118,477)	1,720	-	· -
Total current liabilities	145,898	(114,762)	19,665	(1)	50,800
Deferred income taxes	12,321	7,385	(7,804)	· _	11,902
Long-term debt	253,689		2,023	_	255,712
Pension liabilities	11,307	-	3,233	-	14,540
Postretirement benefit obligation	10,602	-	5,064	-	15,666
Accrued environmental remediation	1,457	-	8	<u> </u>	1,465
Total liabilities	435,274	(107,377)	22,189	(1)	350,085
Stockholders' equity	200,635	275,734	93,152	(368,886)	200,635
Total liabilities and stockholders' equity	\$635,909	\$168,357	\$115,341	\$(368,887)	\$550,720

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Balance Sheets December 31, 2001

	Non-					
		Subsidiary	Guarantor			
	Parent	Guarantors	Subsidiaries	Eliminations	Consolidated	
(In thousands)						
Assets						
Current assets						
Cash and equivalents	\$ -	\$ -	\$22,739	\$ -	\$22,739	
Accounts receivable, net	(6)	43,786	23,384	-	67,164	
Inventories	57,849	17,266	28,245	=	103,360	
Refundable income taxes	2,823	(808)	395	•	2,410	
Prepaid expenses and other	3,327	3,291	612		7,230	
Total current assets	63,993	63,535	75,375	-	202,903	
Property, plant and equipment, net	148,041	36,018	34,417	-	218,476	
Deferred charges, net	2,613	61	451	-	3,125	
Goodwill, net	23,154	75,521	1,195		99,870	
Assets held for sale	5,381	-	3,691	•	9,072	
Prepaid pensions	4,866	-	1,115	-	5,981	
Investments in subsidiaries	344,412	302		(344,714)		
Total assets	\$592,460	\$175,437	\$116,244	\$(344,714)	\$539,427	
Liabilities, Redeemable Preferred Stock and	··					
Stockholders' Equity						
Current liabilities						
Accounts payable	\$17,274	\$3,523	\$14,236	\$(896)	\$34,137	
Accrued liabilities	10,960	884	13,845	•	25,689	
Short-term borrowings	-	-	1,684	-	1,684	
Intercompany balances	89,383	(100,200)	9,922	895		
Total current liabilities	117,617	(95,793)	39,687	(1)	61,510	
Deferred income taxes	11,070	6,144	(7,989)	-	9,225	
Long-term debt	247,698		-	-	247,698	
Postretirement benefit obligation	10,809	•	4,911	-	15,720	
Accrued environmental remediation	1,854	-	8	-	1,862	
Total liabilities	389,048	(89,649)	36,617	(1)	336,015	
Redeemable preferred stock	2,000	-	-	-	2,000	
Stockholders' equity	201,412	265,086	79,627	(344,713)	201,412	
Total liabilities, redeemable preferred stock and					· · · · · · · · · · · · · · · · · · ·	
stockholders' equity	\$592,460	\$175,437	\$116,244	\$(344,714)	\$539,427	

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Statements of Cash Flows For the Year Ended December 31, 2002

		Subsidiary	Non- Guarantor		
	Parent	Guarantors	Subsidiaries	Eliminations	Consolidated
(In thousands)					
Operating Activities					
Income from continuing operations	\$6,677	\$11,449	\$12,449	\$(23,405)	\$7,170
Depreciation and amortization	12,392	3,381	2,643	-	18,416
Other non-cash items	(4,623)	2,720	244	-	(1,659)
Equity in earnings of subsidiaries	(23,405)	-	•	23,405	-
Changes in operating assets and liabilities	13,267	2,638	1,604		17,509
Net cash provided by operating activities	4,308	20,188	16,940	-	41,436
Investing Activities					
Additions to property, plant and equipment	(5,120)	(986)	(1,641)	-	(7,747)
Other	(1)	-	1		-
Net cash used for investing activities	(5,121)	(986)	(1,640)	-	(7,747
Financing Activities					
Financing fees and expenses paid	(8,687)	-	•	-	(8,687
Net payments on revolving credit facilities	(97,907)	-	(465)	-	(98,372
Intercompany borrowings (payments)	27,309	(18,351)	(8,958)	-	
Net increase in note payable	-	-	2,021	-	2,02
Proceeds from issuance of senior notes	118,546	-	-	-	118,540
Retirement of senior notes	(13,901)	-	•	-	(13,901
Issuance of common stock	89	-	~	-	89
Redemption of preferred stock	(1,000)	-	•	-	(1,000
Dividends paid on preferred stock	(58)		-		(58
Net cash provided by (used for) financing activities	24,391	(18,351)	(7,402)	-	(1,362
Effect of exchange rate on cash and equivalents	-	(50)	924		874
Net cash provided by continuing operations	23,578	801	8,822	-	33,201
Net cash used for discontinued operations	(1,117)	(801)	(102)		(2,020
Net increase in cash and equivalents	22,461	-	8,720	-	31,181
Cash and equivalents at beginning of period		-	22,739	_	22,739
Cash and equivalents at end of period	\$22,461	\$ -	\$31,459	\$ -	\$53,920

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Statements of Cash Flows For the Year Ended December 31, 2001

	Parent	Subsidiary Guarantors	Non- Guarantor Subsidiaries	Eliminations	Consolidated
(In thousands)	1 dient	Guarantors	Subsidiaries	Limitations	Consolidated
Operating Activities					
Income (loss) from continuing operations	\$(19,798)	\$6,972	\$11,316	\$12,952	\$11,442
Depreciation and amortization	11,029	5,393	2,257	•	18,679
Non-cash portion of restructuring and other charges	889	642	-	-	1,531
Other non-cash items	(735)	(2,583)	1,823	~	(1,495)
Equity in earnings of subsidiaries	12,952	-	-	(12,952)	-
Changes in operating assets and liabilities	5,937	(7,849)	(1,598)	•	(3,510)
Net cash provided by operating activities	10,274	2,575	13,798	-	26,647
Investing Activities					
Additions to property, plant and equipment	(19,441)	(1,447)	(6,724)	=	(27,612)
Other	(1,530)	3	(74)	-	(1,601)
Net cash used for investing activities	(20,971)	(1,444)	(6,798)	-	(29,213)
Financing Activities					
Net borrowings on revolving credit facilities	16,505	-	219		16,724
Intercompany borrowings (payments)	(5,658)	(1,131)	6,789	-	
Net decrease in note payable	-	-	(320)	-	(320)
Issuance of common stock	130	-	-	-	130
Dividends paid on preferred stock	(280)	-	-	-	(280)
Net cash provided by (used for) financing activities	10,697	(1,131)	6,688	-	16,254
Effect of exchange rate on cash and equivalents	-	-	(1,139)	-	(1,139)
Net cash provided by continuing operations	-	-	12,549	-	12,549
Net cash used for discontinued operations	-	-	(13,268)	-	(13,268)
Net decrease in cash and equivalents	-	-	(719)	-	(719)
Cash and equivalents at beginning of period			23,458	<u> </u>	23,458
Cash and equivalents at end of period	\$ -	\$ -	\$22,739	\$ -	\$22,739

Wolverine Tube, Inc. and Subsidiaries Condensed Consolidated Statements of Cash Flows For the Year Ended December 31, 2000

			Non-		
		Subsidiary	Guarantor		
	Parent	Guarantors	Subsidiaries	Eliminations	Consolidated
(In thousands)					
Operating Activities		*			
Income (loss) from continuing operations	\$26,689	\$9,906	\$15,735	\$(26,423)	\$25,907
Depreciation and amortization	10,916	3,916	2,208	-	17,040
Other non-cash items	5,937	380	(394)	-	5,923
Equity in earnings of subsidiaries	(26,423)			26,423	-
Changes in operating assets and liabilities	(1,385)	(3,509)_	2,666	- _	(2,228)
Net cash provided by operating activities	15,734	10,693	20,215	-	46,642
Investing Activities					
Additions to property, plant and equipment	(24,336)	(2,635)	(4,705)		(31,676)
Acquisition of business assets	(42,346)	(252)	(1,350)		(43,948)
Other		,	2	14	16
Net cash provided by (used for) investing activities	(66,682)	(2,887)	(6,053)	14	(75,608)
Financing Activities					
Net borrowings (repayment) on revolving credit					
facilities	51,508	(761)	(2,076)		48,67
Intercompany borrowings (payments)	7,120	(7,045)	(75)		
Net decrease in note payable	-	-	(338)		(338
Issuance of common stock	58	-	14	(14)	51
Purchase of treasury stock	(7,458)	-	-		(7,458
Dividends paid on preferred stock	(280)	-	-		(280
Net cash provided by (used for) financing activities	50,948	(7,806)	(2,475)		40,653
Effect of exchange rate on cash and equivalents	-	<u>-</u>	(709)		(709
Net cash provided by continuing operations	-	-	10,978		10,97
Net cash used for discontinued operations			(14,414)	·	(14,414
Net decrease in cash and equivalents	-	-	(3,436)		(3,436
Cash and equivalents at beginning of period			26,894		26,89
Cash and equivalents at end of period	\$ -	\$ -	\$23,458	\$ -	\$23,45

Report of Independent Auditors

The Board of Directors Wolverine Tube, Inc.

We have audited the accompanying consolidated balance sheets of Wolverine Tube, Inc. and Subsidiaries as of December 31, 2002 and 2001, and the related consolidated statements of operations, redeemable preferred stock and stockholders' equity and cash flows for each of the three years in the period ended December 31, 2002. Our audits also included the financial statement schedule listed in the index at Item 15(a) (2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Wolverine Tube, Inc. and Subsidiaries at December 31, 2002 and 2001, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Note 1, in 2002 the Company changed its method of accounting for goodwill.

/s/ Ernst & Young LLP

February 14, 2003 Birmingham, Alabama

Wolverine Tube, Inc. and Subsidiaries Schedule II—Valuation and Qualifying Accounts

	Balance Beginning of	Charged to Cost and	Charged to Other		Balance at End of
Description	Period	Expenses	Accounts	Deductions	Period
(In thousands)					
YEAR ENDED DECEMBER 31, 2002:					
Deducted from assets accounts:					
Reserve for sales returns and allowances	\$699	\$249	\$(187)	\$(253) (1)	\$508
Allowances for doubtful accounts	1,823	492		(1,834) (2)	481
Totals	\$2,522	\$741	\$(187)	\$(2,087)	\$989
YEAR ENDED DECEMBER 31, 2001:					
Deducted from assets accounts:					
Reserve for sales returns and allowances	\$494	\$358	\$(153)	-	\$699
Allowances for doubtful accounts	439	1,697	(112)	\$(201)(2)	1,823
Totals	\$933	\$2,055	\$(265)	\$(201)	\$2,522
YEAR ENDED DECEMBER 31, 2000:					
Deducted from assets accounts:					
Reserve for sales returns and allowances	\$500	\$989	_	\$(995)(1)	\$494
Allowances for doubtful accounts	293	558	-	(412)(2)	439
Totals	\$793	\$1,547		\$(1,407)	\$933

⁽¹⁾ Reduction of reserve, net of translation adjustments, for actual sales returns and allowances.

⁽²⁾ Uncollectable accounts written off from both continuing and discontinued operations, net of translation adjustments and recoveries.

EXHIBIT INDEX

Exhibit Number	Description	Sequential Page Number
10.20	2002 Change in Control, Severance and Non-Competition Agreement by and between Wolverine Tube, Inc. and Massoud Neshan dated as of July 12, 2002.	
10.21	Amendment No. 2 to Credit Agreement, dated as of March 25, 2003, by and among the Company, its U.S. and Canadian Subsidiaries and the lenders named therein.	
10.22	2003 Annual Performance Incentive Plan	
21	List of Subsidiaries	
23	Consent of Ernst & Young LLP, Independent Auditors	
99.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	
99.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	

Wolverine Tube, Inc. and Subsidiaries Exhibit 21—Subsidiaries of Registrant

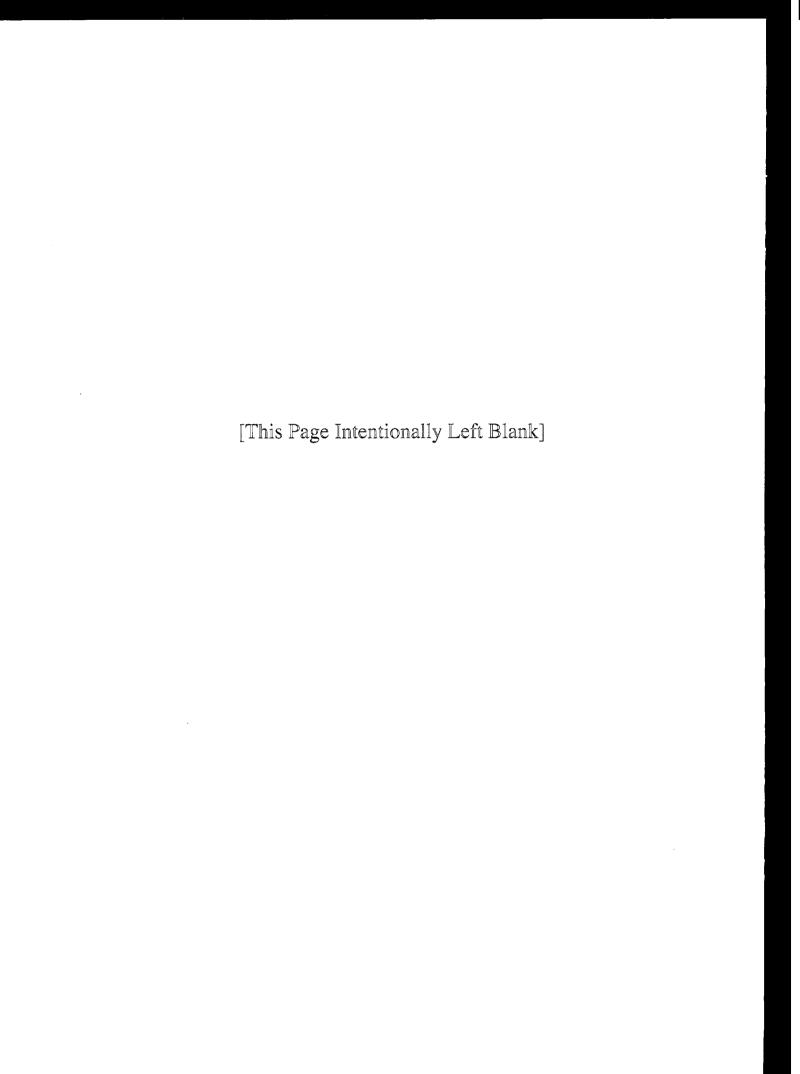
Name	State or Other Jurisdiction of Incorporation
Small Tube Manufacturing LLC	Delaware
Tube Forming, LP	Delaware
Wolverine Europe (EURL)	France
Wolverine Europe Holdings, B.V.	The Netherlands
Wolverine Finance Company, LLC	Tennessee
Wolverine Joining Technologies, LLC	Delaware
Wolverine Joining Technologies Canada, Inc.	Canada
Wolverine Tube Europe B.V.	The Netherlands
Wolverine Tube, B.V.	The Netherlands
Wolverine Tube (Canada) Inc.	Canada
Wolverine Tube (Shanghai) Co. Ltd.	China
Wolverine Asia, Ltd.	Hong Kong
Wolverine Tubagem Portugal, LDA	Portugal
TF Investor, Inc.	Delaware
Tube Forming Holdings, Inc.	Delaware
WT Holding Company, Inc.	Delaware
3072451 Nova Scotia Company	Nova Scotia
3072452 Nova Scotia Company	Nova Scotia
30724531 Nova Scotia Company	Nova Scotia
Wolverine Tube Canada Limited Partnership	New Brunswick
STPC Holding, Inc.	Delaware
Small Tube Europe, NV	The Netherlands
Wolverine China Investments, LLC	Delaware
Ratcliffs Copper and Brass Sales, Ltd.	United Kingdom

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in (i) the Registration Statement (Form S-8 No. 33-73550) pertaining to the 1993 Equity Incentive Plan of Wolverine Tube, Inc.; (ii) the Registration Statement (Form S-8 No. 33-73490) pertaining to the 1993 Stock Option Plan for Outside Directors of Wolverine Tube, Inc.; (iii) the Registration Statement (Form S-8 No. 33-87687) pertaining to the Savings Plan of Wolverine Tube, Inc.; (iv) the Registration Statement (Form S-8 No. 333-67958) pertaining to the 1993 Equity Incentive Plan of Wolverine Tube, Inc.; (v) the Registration Statement (Form S-8 No. 333-67968) pertaining to the 1993 Stock Option Plan for Outside Directors of Wolverine Tube, Inc.; and (vi) the Registration Statement (Form S-8 No. 333-67972) pertaining to the 2001 Stock Option Plan for Outside Directors of Wolverine Tube, Inc. of our report dated February 14, 2003 with respect to the consolidated financial statements and schedule of Wolverine Tube, Inc., included in the Annual Report (Form 10-K) for the year ended December 31, 2002.

/s/ Ernst & Young LLP

March 27, 2003 Birmingham, Alabama



CORPORATE OFFICERS AND BOARD OF DIRECTORS

Wolverine Tube, Inc. and Subsidiaries

OFFICERS

Dennis Horowitz
Chairman, President and Chief Executive Officer

James E. Deason
Executive Vice President, Chief Financial Officer
and Secretary

Johann R. Manning, Jr.
Senior Vice President,
Febricated Products, and General Counsel

BOARD OF DIRECTORS

Dennis Horowitz

Chairman, President and Chief Executive Officer, Wolverine Tube, Inc.

James E. Deason
Executive Vice President, Chief Financial Officer
and Secretary,
Wolverine Tube, Inc.

Chris A. Davis
Chairman of the Board and
Chief Executive Officer,
McLeodUSA Incorporated —
o provider of telecommunications
and related services
Director since 1997

Garry K. Johnson Senior Vice President, Sales

Massoud Neshan Senior Vice President, Technology

Keith I. Weil Senior Vice President, Tubing Products

John L. Duncan

Retired President and Chief Executive Officer, Martin Industries, Inc. — a manufacturer of pre-engineered fireplaces, gas heaters, gas logs and related equipment
Retired President and Chief Executive Officer, Murray Ohio Manufacturing Co. — a manufacturer of lawnmowers and bicycles
Director since 1993

Thomas P. Evans
Executive Vice President,
Permal Asset Management – an asset manager
Director since 1995

W. Barnes Hauptfuhrer
Co-Head of Corporate & Investment Banking Division
and Senior Executive Vice President,
Wachavia Corporation – a financial services corporation
Director since 1998

Thomas A. Morton
Vice President of Purchasing and Logistics

Allen E. Dillard
Treasurer and Director of
Corporate Communications

Samuel A. Patterson Corporate Controller

Gail O. Neuman

Retired Vice President, Human Resources, and General Counsel, Nissan Motor Manufacturing Corporation U.S.A. a vehicle manufacturer Director since 1997

Jan K. Ver Hagen
Retired Senior Vice President reporting to the President,
Emerson Electric Co. — a manufacturer and marketer
of electronic and electrical products
Director since 1996

CORPORATE INFORMATION

Corporate Address

200 Clinton Avenue West Suite 1000 Huntsville, Alabama 35801 (256) 890-0460

Transfer Agent and Registrar

Wachovia National Bank Charlotte, North Carolina

Independent Auditors

Ernst & Young LLP Birmingham, Alabama

Annual Meeting of Stockholders

The 2003 Annual Meeting will be held at 8:30 a.m. EDT on Wednesday, May 14, 2003 at The Benjamin Hotel, 125 East 50th Street, New York, New York 10022.

On March 31, 2003, there were 289 stock-holders of record. The closing price of the Company's Common Stock was \$5.71 on December 31, 2002.

Investor Relations Contact

Allen E. Dillard Wolverine Tube, Inc. 200 Clinton Avenue West Suite 1000 Huntsville, Alabama 35801 (256) 580-3625 Telephone (256) 580-3993 Facsimile

Annual Report on Form 10-K

A copy of Wolverine Tube, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2002, filed with the Securities and Exchange Commission, is enclosed herewith.